The definitive guide to caring for your Jaguar.

By:

Gregory Andrachuk

Web Preparation by Jim Downes, Acrobat Conversion by Henry Fok

Copyright 2002 by Gregory Andrachuk and Jag-Lovers.org. All rights reserved. Do not reproduce without permission.

Thanks to **Doug Dwyer** for scanning a large number of photographs.

<u>Next</u>

TABLE OF CONTENTS



Note: Clicking on most pictures will generate a larger image. Either close the image or use your back-arrow to continue.



Foreword

This is the third edition of Jagcare, which like the first, is written for members of the Jag-lovers XJ list (xj@jag-lovers.org.). Its purpose is to provide the owner of the XJ saloon with a handy guide to authenticity, and to the upkeep of these fine automobiles. Much of the information is applicable to any car, of course, and particularly to any Jaguar or Daimler. Owners of XJS models of the 1970s and 80's will also find this booklet useful as these cars shared many components and characteristics with the XJ saloons.

(One preliminary note: The Daimler is simply a Jaguar with the best possible interior trim, and a different grille, boot plinth, and badges. They are identical in every other respect. Think of the Rolls Royce/Bentley arrangement and you will have the idea exactly. The Daimler is considered to be slightly more "posh" than the Jaguar. In some countries legal restrictions prevent the marketing of the cars under the trade name of Daimler; In those cases, the top-line Jaguars are typically given Daimler interior trim. Such is the case with the Jaguar Vanden Plas models in Canada and the US).



1984 XJ6 Sovereign in Cranberry

Jagcare is directed principally to the owner of the Series III saloon, produced in both Jaguar and Daimler variants from 1979 to the end of 1992, although reference will also be made to the Series I (1969 through 1973) and the Series II (1974 to mid-1979)

saloons, as all these cars have many parts in common, and have an evolutionary history. It is not my purpose to provide instruction in heavy mechanical repair, although regular maintenance is easily done by almost any owner. The great advantage of doing so is that the owner becomes familiar with the condition of the car, and is quickly able to assess any problems.

One of the small delights of Jaguar ownership is our entitlement to the use of (to North American ears) quaint terms. Jaguars have bonnets, not hoods; boots not trunks, wings, not fenders. All of this seems normal to an Australian or a Scot, of course. I use these terms and other in Jagcare, although I draw the line at the use of offside and nearside, "H reg." and other terms that our British cousins use to confuse and annoy the colonials. Readers will just have to accept my Canadian spellings (these will seem inconsistent to both Americans and Brits: both "colour" and "tire" for example, are Canadian usages, the

first being normal to a British reader, the second to an American). One more thing: the name JAGUAR is variously pronounced as a two syllable word [Jag-war], or [Jag-wah], or a three syllable word [Jag-u-ah], but please, please, not as [Jag-wire].

My experience is based on 30 years of Jaguar-lust, and the ownership and light restoration of several XJ saloons, two 4.2 litre six-cylinder cars and four V12 5.3 litre cars. Recommendations made in Jagcare arise from what I have learned in preparing my cars both for reliable ownership and concours d'élégance competition. Jaguars are meant to be driven as well as admired, and there is nothing quite so sad in my view as a Jaguar that never sees the open road. The more you use them, the better they run. Note: the engine used in the XJ6 is called the XK engine, and its origins date from the late 40's of the last century (!) although it was continuously refined, and in its EFI S3 form, it is a wonderful engine both in appearance and performance. The V12 engine was installed first in the the E-Type of the 70's and was eventually fitted to the S1 XJ in 1973. During the early S3 period the V12 engine received a new set of heads (designed by Michael May) which greatly increased fuel economy and allowed an increase in the compression ratio. This variant is known as the H.E. (High Efficiency) engine and the early S3 cars which have it are so marked. By 1982, although the engine remained the same, the badging, at least for Canadian V12 saloons, did not include the "H.E." This engine, now with an advanced, 3rd generation electronic control unit (ECU), was fitted even to the very last 1992 Series 3 cars. I own one of these, #92 of the last 100 Jaguar V12 Vanden Plas cars.

Previous Page

<u>Contents</u>





This fine automobile, equipped with ABS braking, a boot-mounted CD changer, and other items, is in all but name, a Daimler Double Six. During 1992 the only Series 3 cars produced were Daimlers, except for the 100 cars sent to Canada, badged as Jaguar Vanden Plas models. The Jaguar V12 Vanden Plas was a "Canada-only" model, produced in very limited numbers throughout its life (1982 to 1992).

American readers are advised that although the US market was and is the largest for Jaguar, the U.S. range of Jaguars was quite limited in comparison with that offered in other markets, and therefore they should not consider their cars to be necessarily "typical" in terms of equipment or model. In the Series 3, for example, the US range was restricted to the XJ6 and the XJ6 Vanden Plas (and available only to 1987), while in contrast Canadian buyers had a choice of the XJ6, XJ6 Sovereign and the V12 Vanden Plas (as stated above, the V12 right to the end of 1992). Similar choice was available for Australian and New Zealand and German buyers (to mention just a few of the major markets) while the UK model range was even larger, including a small engine (3.4 litre) model and the Daimler range. The flagship model, available in the UK, was the V12 Daimler Double Six, and in fact the very last Series 3 car produced (December, 1992, now preserved in the hands of Jaguar) was one of these. To add to the confusion, the S2 car continued to be assembled in South Africa for that market as late as 1980, while subsequently both the Daimler and Jaguar were offered in Series 3 form there.



1988 V12 Vanden Plas, Canadian Specification

It has seemed convenient to follow the general format of the original Jagcare: the car will be dealt with in sections as the owner moves around it. I use the forms "S1, 2 and 3" throughout the book. Recommendations for specific products and suppliers are made from my own experience, but are not intended to exclude others I may not have tried. Because the Jag-lovers list is broadly international it is not possible for any one member to have access to all products available in all markets. References to "Thorley" are to the excellent book by Nigel Thorley: Original Jaguar XJ (Bay View Books, 1998; ISBN 1 901432 11 4). While his book is a superb reference for the XJ saloon owner, it

fails often to take into account variations on export models, and thus owners outside the UK should not rely strictly on his information for authenticity.

Previous Page

<u>Contents</u>



The XJ Saloon: the mystique

How do we define the Jaguar mystique? What is it that Jaguars have that other cars do not? Even people who are not generally interested in cars can immediately identify a Jaguar, new or old. Perhaps it is that rare combination of understated elegance and grace, a certain "presence" on the road. And perhaps one more thing: the continuity of design which makes the model year largely irrelevant. Did you know that Jaguar generally avoided model year designations? Look at your owner's manual; you will find that no reference to the year of your car is given. The Series 3 manual says simply that: "Series III", whether the car is a 1980 or a 1992 model. It is almost impossible to find a model year reference in an XJ sales brochure.

This is an intentional omission on the part of Jaguar who wished to stress the continuity and evolution of design and engineering. A verbatim quote from an Australian Jaguar Series 3 brochure of indeterminate year illustrates Jaguar's attitude very clearly: "Jaguar design over the years demonstrates the virtue of not frequently re-styling, but simply refining the vehicles until technological progress should demand a radical revision. In that way, every new Jaguar seems destined for success, building on proven excellence. There is no risk of 'built-in obsolescence'. Perhaps most important of all, there has been a Jaguar family likeness instinctively handed down over the years. Indeed when the current Series III models superseded the Series II saloons, the styling differences were hardly noticeable to some people at first glance". "Science is employed to create the body styling too. The dictates of optimum aerodynamics have been tempered by aesthetics, to produce a profile which not only works well, but looks right....In other words, the Jaguar leads the technology, not the other way round. While under the surfaced the technology is leaping forward, its interface with the driver will remain uncomplicated."

As we contemplate the difference between the Jaguar, always distinctive in design, and other cars which look like minor and indistinguishable variations on the "optimal" wind tunnel design, we can only be grateful for this approach. Here is an example that comes to mind. In the '70s Mercedes Benz trumpeted the virtues of their redesign; the heavily ribbed tail lamps especially were promoted as being "self-cleaning" as wind and rain would clean any accumulated mud from them. This ribbed design disappeared before too long in another redesign of the Mercedes; now, if the ribbed tail lamps were a good, scientifically-based idea in 1973, would it still not have been a good idea in later years? Hmmmm.....

Previous Page

Contents

The cabin of a Jaguar is unmistakable in its elegance, with its combination of fine wood, Connolly leather and accents of chrome. The classic XJ saloon does not have as many toys inside as some other cars, but these items are generally superfluous in any case. The same Australian Jaguar brochure puts this honesty of design superbly: "Significantly - following classic design principles - everything in a Jaguar interior is what it seems. In the rare instances when practicality demands the use of synthetic trim materials, the idea of using moulded 'stitch lines' is unthinkable. Befitting a car of Jaguar's status, the door handles are designed to avoid possible damage to diamond tings, and the cloth seating fitted to some models has even been selected in a material which will not pull the fur from mink coats." This leaves one speechless, but with a clear idea of exactly whom the Jaguar was designed for. One of my favourite memories is that of being in London several years ago and seeing HRH Prince Charles in the rear of a chauffeured Series 3 Daimler Double Six.



1982 XJ6 'Sovereign'

When all is said and done, the Jaguar is a car which pleases the senses, and does so in a way that virtually no other automobile seems able to. Those of us who have Jaguars can attest that our cars simply make us feel good, whether driving, tinkering, polishing, or just staring at them. Even among Jaguars the XJ saloon holds a special place. This was the most successful car ever designed by Jaguar and was literally responsible for ensuring the survival of the company in difficult times. The legacy of the Series 1, 2 and 3 XJ continues today in the beautiful XJ8 saloon, arguably the best Jaguar ever built (although perhaps not quite as beautiful as the S3).

Jagcare is offered to owners interested in the enjoyment and preservation of these unique automobiles.

Previous Page

<u>Contents</u>



Safety

First a note about safety and the practice of raising the car. The XJ saloon is provided with 4 sturdy jacking pegs. The serious owner should have available a hydraulic jack of *at least* 2.5 ton capacity. The cup on the jack fits nicely and securely under the jacking peg. Raising the car in this way is perfectly satisfactory for removing the road wheels and for light work at the edges of the car, but the owner should never get under the car if it is supported only in this way. The second bit of equipment necessary for routine work is a pair of axle stands, again of at least 2.5 ton capacity. The entire front end of the car can be lifted by placing the hydraulic jack (with a piece of wood on the cup) centred under the front subframe. When the front end has been raised sufficiently, the axle stands can be placed under the jacking peg mount (not under the peg itself unless the jack is fitted with a cup, immediately behind and touching the peg. The car can then be gently lowered until the weight is primarily supported by the jack stands. The hydraulic jack should be left in place as an added precaution. At the rear, a similar procedure is used, with the hydraulic jack and a block of wood used under the rear centre of the suspension cage. There are flanges on the cage and it is best to construct a block arrangement with two additional (small) wooden pieces to avoid damaging the flanges. An illustration of this is found in the owner's manual. Safety is of prime concern here. Never get under the Jaguar unless you are absolutely certain that it is secure.

* * * * * * * * * *

Previous Page

<u>Contents</u>

FRONT WINGS

The front wings on the XJ series cars are not interchangeable, although they look similar. Series 1 wings are quite scarce now, and the Series 2 and 3 wings are expensive so some prudent care of them is in order. Although the wheel arch and other details changed, the general construction and fitting remained the same. The wings are bolted to the car, the bolts at the top being evident when the bonnet is opened. Later cars, the '87 to '92 models use large torx-head screws instead of the hex bolts. There are further fixings at the lower edge of the wing behind the front wheel, accessible when the inner splash panel is removed, and at the front.

There are two main points of corrosion on the wings: the first is at the headlamp surround. Mud and water are thrown up by the wheel and become trapped here. This is a common problem with cars used in salty environments, but the Series 3 cars suffer less from this after 1981. It is good practice to clear any mud from above the headlamp bucket, using a wooden stick (not metal; you do not want to scratch through the wax protection), and then to rinse with a strong spray of water. While we are at this end of the wing, it should be noted that the air intake above the headlamp is entirely unused on climate-controlled cars after 1981. Cars before this date and later cars with a heater unit only, do use this intake as a source of fresh air, and they have a "vent" control knob in the front footwells. On climate-controlled cars the intake tube is blanked off in the inner footwell panel, although the tubing is in place.

The most common place for corrosion is found behind the front wheel, right around the Jaguar or Daimler badge. This inner wing area is sealed from the elements by a splash panel and rubber seal; frequently the seal fails and dirt, and moisture, sometimes salt-laden, finds its way in. The problem can be compounded by the fact that sunroof-equipped cars have their front drain tubes empty into this cavity. The water in normal circumstances then exits via two large holes provided at the bottom edge of the wing. If these holes become clogged by accumulated mud, the result is a bubbling around the badge. Craig Sawyers pointed out that on his car the front wings had been replaced and the very bottom edge is a fold; this is true of the factory fitted wings as well but this area is sealed by a wax coating at the factory. IF, however, there is a break in this seal, then water can be trapped in the fold; in freezing conditions the seam can split, salt water can enter and the cycle of corrosion begins.

It is a good idea to remove the front wheel, remove the inner panel (bolts and screws; very easy), and to check this cavity. On one of my cars, the driver's side cavity was full of damp mud! On all the others, these cavities were absolutely dry and even had cobwebs; proof that the original design is not faulty, PROVIDING the seal is intact. If you find mud or dirt, clean it thoroughly, vacuuming any dirt out of the folded seam, if necessary. Then, spray a good quality, VERY THIN rust inhibitor in this area, paying particular attention to the fold. I use a product called RUSTCHECK which is made here in Canada (note to Canadians: this product is available at Canadian Tire); it effectively displaces wate and coats the metal. It is so thin that it continues to creep, especially in warm weather, so it gets EVERYWHERE it is supposed to get. There must be similar products used in other countries, and I believe that Waxoyl makes a comparable item. Once you have assured yourself that the area is thoroughly clean and rustproofed, refit the seal using a bead of silicone sealant, fit the splash panel, and make a very careful visual check for integrity of the seal. The final step should be a careful removal of mud from the outer lip of wheel opening, and a further rinse.

Previous
Page





Please note that the wing badges, contrary to what Thorley says, ARE "handed" left and right in every series, and are not interchangeable from side to side. The Leaper on the Jaguar badge is to be running forward, of course. If yours is running shamefully towards the back in fear, then you need to switch the badges to the opposite side of the car. This is a sign of some bodywork (possibly only painting) having beendone. The Series 1, 2 and early 3 cars to '82 used the same plastic badge, in silver and black, except for the XJ12 which used a gold and black badge. The '83 to '92 cars have a revised silver and black, metal and plastic badge. All badges have a rubber gasket and two pin fitting, except for the very last version on the '90 to' 92 cars which is fitted using an adhesive backing,



Early style Series III wing badge

and no rubber gasket. The Daimler badges, by the way, as fitted to the S3 model, are the traditional "D", used on the road wheels, the grille and steering wheel. The door sill plates similarly are badged for the Daimler, and in the late S3 car ('83 to '92) the "Daimler" script is also found on the console switch panel in place of the Jaguar Leaper.



Later style Series III wing badge

The side marker lights on the Canadian and US cars sometimes present problems. These lamps are bolted to the wings but are exposed to the elements on the inner wing surface so that the nuts are almost impossible to remove without breaking the stud. Because of their location these lamps sometimes suffer from corrosion on the inner socket. To remove the bulb, first remove the lens (one pozidrive screw; a Phillips screwdriver will work). Now take a piece of vacuum hose such as used on the engine and fit it over the bulb. This will allow you to push and turn the bulb to free it. Normal human hands are too big to work in this space. The socket contact must be clean and the spring free to exert pressure on the bulb. A small flat

blade screwdriver can be used to clean the contact, while reaching round from the rear of the wing the wire can be pushed inwards to free the spring. Clean the bulb contact as well. If this fails to reactivate the bulb, then the problem may lie in the ground connection at the rear of the unit. This is unfortunately exposed to all manner of road dirt and water and sometimes the contact is lost. The ground connector is a simple bullet connector fitted into an open-ended cylinder. Clean the bullet connector, and the inside of the cylinder with a bit of folded sand-paper. Refit, making sure the contact is secure.



North American front marker lights

Lastly: when working on your Jaguar, keep your ELBOWS OFF THE WING! If you look along the top edge of the wing, you may very well see some minor indentations. These are the imprints of mechanics' elbows. Pinstripe or coachline: Series 2 and 3 XJ cars had a factory coachline (single to '82, double from '83 to '92; none on S1, almost always on S2), except on the early "small engine" cars. The coachline should not extend beyond the swage line (the "crease") at either the front or rear of the car. If it does, it not only looks "wrong", but is another clue

to a repaint or body repair. The

coachlines are available from Jaguar, but are expensive. The double line in the original form has tapered and rounded ends. It is entirely possible to use commonly available coachlines and to taper the ends appropriately, if not exactly as original.. The important thing is not to allow the ends to extend beyond the swage line. There was some minor variation in length from year to year and car to car even with the factory-applied versions. The factory lines on the Vanden Plas version were very muted in colour, but the cars often benefit visually from a slightly more distinct colour (a soft gold works well on most body colours).



1982 single coachline

1982 single coachline

The UK (early) Vanden Plas and Double Six models carried a chrome moulding as well as the coachline. This moulding was applied above the swage line, and was available as an option for the home market; it was also fitted to some Series 2 xj12 cars, and by special order for export cars. In a concours in 1999 in Vancouver I saw a lovely late S2 V12 model, with exterior trim of the UK Vanden Plas type: the chrome swage trim, and most notably, a vinyl covered roof. This was so rare on a Canadian market car that there was, at first, some question of authenticity.

> Previous Page

<u>Contents</u>











DOORS

The S1 and 2 cars use the same doors (with the caveat that there are both short and long wheel base versions in these Series, so the rear doors can be short or long). The S3 cars have an entirely different roofline in that elegant restyling by Pininfarina. The restyling eliminated the front no-draught window for a cleaner and more modern appearance. In any case the doors of the S3 are not interchangeable with the earlier series.

Front doors: with respect to S3 cars, the electric mirrors (manual in some early UK cars) are attached to the door by screws which enter captive nuts. (This may also be the case with the manual mirrors in S1 and 2 cars). For any repaint, the mirrors should ideally be removed. In practice this is sometimes very difficult as these captive nuts sometimes come loose and begin to rotate, meaning the mirror cannot be removed. You can get at the nut from inside, with some difficulty. When you DO get the mirrors off, make sure that you do not lose the connectors in the door. The harness from the mirror switch is connected in a fool-proof way (my mechanic says that Jaguars are built for idiot mechanics; that is, even an idiot cannot connect things the wrong way on a Jaguar since the company made multiple connectors fit only one way); in addition, plastic ties are used to secure the connectors. Make sure that you replace these on reconnection.

Door handles: The S1 and 2 door handles are a straight forward, traditional push button type. A little lubrication keeps them going forever. The S3 cars began with the flush fitting chrome handles and chromed surround. By 1981 the surround was black powder-coat, an earlier painted version not proving durable. These last types can remain new looking indefinitely, but a coat of wax helps keep the black black, and the chrome shiny. There is a black plastic gasket that fits between the handle surround and the body; this often takes on a rather worn appearance, but new gaskets are inexpensive and easily available. You will often find Series 3 handles that do not retract flush (although they do not break like the troublesome early xj40 handles). This is merely a lack of lubrication, and some WD40, Liquid Wrench with Teflon or even better, silicone lubricant will fix this problem, best done by removing inner trim panel (if you do this, and every XJ should have this done every 10 years), then lubricating all the lock mechanism, and putting grease on the rods where they pass through the plastic clips.

Electric locks: the procedure noted above will ensure that the electric locking mechanism continues to work as it should. If your locks are hesitant or inoperative, that is almost always the cure. I have cured a completely "dead" system on a friend's car with WD40. He was all set to have new solenoids installed! The fix simply involved a generous application of lubricant, and manually working the locks. Within two minutes the electric mechanism worked perfectly.. NOTE: removal of inner door trim will be covered further on). The later Series 3 cars ('86 to '92) used a system of Kiekert motors rather than solenoids. These have proved to be not quite so reliable as the earlier version, although I have not had trouble. Problems seem to stem from lack of lubrication and misadjustment of the control rods.

A couple of idiosyncracies of the Jaguar system: first, the electric lock mechanism is always operable from the driver's exterior door lock, as well as from the handle on the door, or from the central console switch in S2 cars. Operation of this lock will secure all the doors as well as the boot. On cars up to '83, this same feature was workable from the front passenger lock as well. On the '84 and later cars, Jaguar in its wisdom, or lack thereof, decided to eliminate the locking from the passenger door lock. Most inconvenient. The fuel caps are locked separately, by key.

Previous Page

<u>Contents</u>

Please note that it is proper and normal for the boot to lock, but not un-lock with the central system. This is a security feature which in conjunction with the use of the "valet key" (has yours gone missing?) allowed the owner to hand the car over to one of those eager young men, secure in the knowledge that the contents of the boot were safe.



Boot Lock Mechanism

It is possible for the owner to revise the linkage in the boot to allow the boot to be unlocked as well. This procedure simply involves limiting the movement of the rod in its slide. Whether your car has the solenoid system or the later Kiekert motorised system, the adjustment is the same. The solenoid or motor pushes a rod attached to a bar on the lock in order to lock the boot. But when the solenoid moves to unlock, the rod is allowed to slide within a cutout in the bar, so that no movement is made in the lock itself. All that is needed is to limit the movement of the rod in that slide; this can be done by a number of means, including fitting a simple nut and bolt into the slide. Observation of the mechanism makes all of

this clear, and the lock can be manipulated manually by moving the rod. Doug Dwyer recently posted details to the Jag-lovers list for wiring a remote lock control into the Kiekert equipped cars.

Door trim: Occasionally the stainless steel window trim at the exterior top rear edge of the front doors will drop a bit, making that 45 degree joint a little too obvious (this is right at the top rear corner of the door). If you have a wider-than-desirable seam where the top and the side trim meet, then open the door, and with a very fine flat bladed screw driver, push the trim UP at the bottom edge. The point of access is a "hole" at the top curve of the door panel just where the window frame begins. This sounds more complicated than it is, and in practice the cure is obvious. We are talking about a very minor adjustment here, of interest to concours participants!

The doors are not particularly rust-prone, but sometimes the drain holes at the bottom become clogged. In extreme cases, you can have litres of water sloshing around in the doors. Make sure the holes are clear, spray some RUSTCHECK or similar up into the door. It will find its way down into the bottom fold. When and if you remove the inner door trim, you can do a thorough job of rust-proofing. Corrosion on the doors, if it is present at all, is usually limited to the front and rear edges.

If the doors are not fitting flush at the closing edge, a minor adjustment can be done by moving the striker plate. You need a large torx head screw driver to do this. The screws are merely loosened, not removed. Before loosening, mark with a pen the outline of the existing plate position. Then simply move the plate in or out to make the panels fit flush. You will have to fiddle a bit to make sure that the bar slides into the door latch without binding (this is a vertical or angle adjustment); otherwise you are in effect lifting or dropping the door as it latches, which is not good for the hinge. Very rarely the front (hinge) edge of the door needs adjustment; this is done at the hinge, and is not to be undertaken lightly. Most often, IF any adjustment is needed, it is at the striker plate. The front doors, most often the driver's door, will sag very slightly, almost unnoticeably. The first indication is that the rubber weatherstripping on the door rubs on the B pillar as the door is closed. Eventually the paint will be worn away. Nothing

need be done about this unless the missing paint bothers you.





The stainless trim benefits greatly from use of a good fine grade metal polish followed by wax. My favourite metal polish is AUTOSOL, which is a German product, although manufactured under license in Canada (and possibly elsewhere). In the case of S3 cars, do not forget to get the wax out of the indentation that runs along the trim.

Again, for S3 cars: all doors should have the small rubber plug at the top edge, where the front and rear doors meet. This is known as a "whistle stop" for obvious reasons, and was added in the early S3 production to stop such noise at highway speeds. They are very often missing, but can be procured from "donor cars". I mean the cars in the auto wrecking yards, not cars on the street! This does not apply to S1 and S2 cars, which have an entirely different type of trim.



Whistle Stops

Weather stripping: good weatherstripping is essential to the silence and accurate climate control of the cabin. If yours is perished or torn, please consider getting the REAL THING. Aftermarket weather strip will fit with some tugging, but it is much more "firm" than the OEM, and you will find difficulty in closing the door without "slamming" it. In this case it helps to make some small holes at the bottom edge of the weather strip to allow air out of the seal as it is compressed. It can take up to three years for an after-market seal to acquire the right "set". This, I can tell you from experience. One thing I have learned about these

Jaguars: after-market parts, with occasional exceptions (the AC amplifier being one) are rarely as good as the originally specified parts. Silicone lubricant is excellent as a preservative and silencer for the weatherstripping, but if you use it, be careful not to get it on the paint.

It may be of interest that the "up market" S3 models (Sovereign, Vanden Plas and Double Six), had chrome plated-parts for the lock plates. a subtle but very effective upgrade. They are interchangeable with the ordinary plates. Again, a good "donor" VDP is a nice thing to have. Finally, do not forget to lubricate the hinges sparingly. The late S3 hinges were improved with a Teflon coated pin. The rear doors on UK market cars (and on the last Canadian S3 V12 cars) had "child lock" levers above the latch mechanism. These were not generally fitted to export cars (at least not to the '80's Canadian and US cars which instead have a rubber plug in this spot). It is very common to find that where the rear doors close on the body, there is a point of abrasion. In all likelihood you will find this on your car, and you will see that it is caused by a raised rib on the inner door face. On my cars I have fitted a small rubber plug to this rib to act as a cushion, and I have secured it by black silicone adhesive which can be removed at any time without disfigurement. By 1987 the factory had recognised this problem and had fitted an adhesive-backed, rectangular piece of foam to the offending spot on the door. Coupé doors: let's clear something up if you don't mind a little pedantry. On this side of the Atlantic it is now common to pronounce the word "coupé" as if it were [koop], that is, something that chickens live in! Not correct, and I think Jag people, especially you XJC owners, should retake this word. The word is French in origin, of course, and means a car whose roof has literally been" cut". The most common example of this is a car whose roof has been shortened or "coupé" to form a more pleasing and shortened roofline. If any of you can remember the cars from the late 40's, say a Dodge businessman's coupé, you will have perfect mental image of this. A recent and quite elegant 4-door example of a coupé is the Rover P5 saloon whose roof was not shortened, but lowered. I always cringe at the thought of driving

something that chickens would live in. The correct pronunciation of this word is [koopay].





In any case, the doors of the Series 2 coupé are longer than those of the saloon by 4 inches. These doors are considerably heavier than the saloon doors and often sag on their hinges. Because they have no frame for the glass, a sophisticated system of weights and pulleys was used to tension the glass against the door seals at speed. The refinement of the sealing mechanism was largely responsible for the delay in the introduction of this handsome car.



If some misguided previous owner has fitted plastic or stainless door edge trim to your car, consider removing it. This trim, offered by dealers after '86, does nothing for the appearance of the Jaguar, and in fact cuts the flowing lines awkwardly. Similarly, unless you really feel you need rub strips along the side, consider removing them. They too, appear to alter the proportions of the beautiful body. This was the very first thing I did on acquiring my

88 V12 Vanden Plas with side moulding

'88 V12. The rub strip was one attached by adhesive strip and could be removed gently by heating with a hair dryer and slowly pulling it away. A few minutes with the 3M #39003 polish and a coat of carnauba revealed a different car. Some of the dealer-applied rub strips unfortunately were rivitted to the body. If yours are fitted this way, you have little option but to leave them in place.

If you have small dents in the side, there are "dent removal" people who can obliterate all trace of damage without touching the painted surface. They work with rods of varying shapes, lengths and thicknesses from within the panel. An expert will leave your car looking new again at a fraction of the cost of bodywork.

Previous Page

<u>Contents</u>



REAR WINGS

I am speaking here of the saloon body; the coupé body has its own rust concerns at the seam with the sill, but in general the observations made here will apply.

The principal rust areas for the rear wing are those directly above the sill joint just behind the rear door, and the arch area. Corrosion can also be found lurking behind the chrome side-bumper area where the lower quarter panel joins. The very best preventative measure is to make sure that you do not have an accumulation of mud in these areas. Clean them thoroughly, hose them clean and let them dry. Once again, the application of a rust preventative is advisable, but I do NOT mean a black asphalt type; these eventually harden, crack, allow moisture UNDERNEATH, and in the end are worse than nothing at all. I mean a thin, oily protectant such as RUSTCHECK, WAXOYL or similar. Both of these manufacturers market a somewhat heavier version than the one used on the inner panels, for use on the underside of the car.

Access to the rear wheel arch area and the area above the sill is very simple: remove the rear seat. You will find that Jaguar has used its own version of duct-tape to seal some large access holes. You can spray the rustproofing in there to cover the areas in question, but you will note that Jaguar has already covered these areas with a wax sealant, at least in the case of the S3 cars. If you now remove the rear light cluster (very easy; remove the lens [for the S3 cars, 4 screws], then remove the chrome housing [3 screws] and pull the housing out, having protected the chrome bumper finisher with a cloth), you can spray along that ledge which sits behind the side bumper. You can also get a general idea of the condition of the fuel tank, at least of the outside. Before replacing the light housing, clean all the bulbs and the lens, replacing any bulbs that have darkened (the sign of a filament nearing the end of its life). Our Jaguars do not suffer from the disfiguring Mercedes/BMW curse of exhaust-blackened lenses, so generally the lenses are fairly clean. On refitting, do NOT over tighten the screws: with regard to plastic fittings, "snug is tight, but tight is cracked".

The rear-wing side lamps on the North American cars generally are trouble free (unlike the front units). They are screwed into a backing plate protected by the inner wing panel, and are easily removed for repainting of the wing or for cleaning.

The lower quarter panel: an observation: the kindest thing for the lower parts of the XJ car, is the fitting of the factory-designed mud flaps. They are extremely effective in not only protecting against stone chips, but more importantly, in keeping the accumulation of mud in the rear valence, and under the chrome finisher, to a minimum. Remember that mud promotes rust! These mud flaps fit all the XJ cars; by the mid-80's, Jaguar provided the holes for mounting and the plastic retainers, already fitted. In fact, by '87, Jaguar was fitting these mud flaps as "standard" equipment in certain markets (such as Canada). If you have an earlier car and must drill the mounting holes, PLEASE ensure that your drill bit is very short; you do not want to drill into the fuel tank!! The mud flaps come with the metal mounting bars, and they fit the contours of the car exactly, so there is no guesswork as to placement. The flaps, which are all black (no white lettering), are available from Jaguar dealers, and our usual suppliers. Highly recommended, and I think they look good!



The lower quarter panel is held to the rear valence by a number of visible screws. These screws are fitted to the car AFTER painting, so they are to be left unpainted. If yours are painted (and this goes for all three series), then your car has had a respray. Those interested in authenticity and/or concours showing should clean the paint off.

Rear Valence showing un-painted bolts

Previous Page

<u>Contents</u>



At the bottom of the quarter panel is the access to the fuel tank drains. When the cars leave the factory, they have a foam-backed black plastic cap fitted. According to some bizarre logic, Jaguar decided to fit the cap from within the panel; you cannot remove it without removing the lower quarter panel, unless you break it. Your car may already be missing this cap; this is good and bad; it means someone has been there before you, but why? If your car still has the cap, this is good and bad; no one has been there before you, but why not? The tanks should be drained periodically (a period of years) to clear out any accumulation of water and debris.

Here is the good news: those of us who value completeness and authenticity want those caps in place. This can be achieved by cutting away three equal segments of the plastic cap flange. The cap has enough "flex" to allow it to be refitted, and removed, if this is done. Once it place it looks perfectly normal since the flange is hidden.

If you have removed your rear wheel for any of these procedures, this is a good time to clean up the contacts for the fuel return valves. You will find a round cover at the rear of the wheel well. Remove the 4 screws (you may need to remove the undercoating on the screw heads with solvent), remove the cover, gently pull the wiring out. separate the bullet connectors, clean with 2000 abrasive paper, wipe, refit tightly (they "snap" into place). Some people like to use dielectric grease to seal these connections, and all connections.

Finally, the rear valence: this frequently fills with mud if the car has not had mud flaps fitted, and often even if they are fitted. Removing the stones and mud is not easy, and there is no specific method I have found. My cars all have some sand and stones in there. The exhaust pipes protrude through two holes in the valence. The early S1 cars had straight pipes, soon replaced with those sensuously curving stainless steel finishers. This is a glorious example of form following function because the curved pipes eliminated a problem of exhaust fumes being sucked back into the cabin.

The joint between the exhaust pipe and the stainless steel finisher pipe sometimes will leak some corrosive condensate down into the valence, eventually producing some rust right below the exit hole. The best way of coping with this is to remove the finisher pipe (one countersunk hex head grub screw), and to put some exhaust sealant on the pipe, refitting the finisher. Occasionally the grub screw will be "welded" to the clamp or exhaust pipe. In that case the procedure is to saw through the clamp and remove it entirely. More good news! These clamps, and the grub screw are available new from Jaguar (part # CBC 8388 for the single clamp, # AGU 1004 for 2 set-screws) These pipes, by the way, take a marvelous shine using a fine metal polish followed by a coat of wax.



Correct placement of North American exhaust finishers

As stated, the Canadian and US cars have different bumpers than those on cars for other markets. The extra depth of the rubber means that the exhaust pipes do not extend beyond the rubber bumper; in fact, they sit directly underneath it. Therefore Jaguar has given specific specifications for the distance between the pipe opening and the rubber bumper, and that is about 1.5 inches. To achieve this, the finisher pipe must sit at a very jaunty angle, when viewed from the rear. In any case, the opening of the pipe must NOT be close to the rubber. In some cases the rubber can be melted and distorted. UK and other-market S3 cars have

the rear bumper fog guards (highly visible red lamps) which can sometimes be damaged also by the exhaust heat.

The valence has three black rubber plugs. One in the centre bottom, and one on either side high up under the bumper. Again, these must not be painted if you seek authenticity.

Previous Page

Contents


Jaguar extended the depth of the undercoated section of the valence where it meets the underbody to incorporate the centre plug in later cars. Up to the mid-80's this black plug is clearly visible. Thereafter it is fitted in the black undercoated section. The shape of the plug also changed through production, the latest ones having a concavity in the centre, the earlier ones being smooth. You will find, by the way, your transmission and body numbers on metal tags high up on the valence where it meets the boot closing panel, and also the "Federal" tag if yours is a non-UK car (this term refers to the body, not to the emissions system, and does *not* mean a US-market car), and a similar tag can be found on S3 cars at the top of the right hand wing in the engine bay, near the front, under the wiring harness.

<u>Previous</u> <u>Page</u>

<u>Contents</u>

REAR BUMPERS

S1 cars had both one piece and three piece chrome bumpers at the rear, later cars having always the 3 piece version. One problem area on the S1 cars was the license plate light whose seal tended to admit moisture after a time. The 1973 S1 car is distinguished by having rubber overriders. Similar bumpers were carried over to the S2 cars except in North America where the Jaguars were fitted with chrome and rubber bumpers of several variations depending upon model year to meet the "8 kmph" regulations. The S3 cars, regardless of market, has similar appearing bumpers: rubber with handsome chrome finishers on top. But the Canadian and US cars again had strengthened units on shock-absorbing mounts so that the rubber portion extended approximately a further two inches, front and rear.

These North American cars, however, did not have the red "fog guards" mounted in the rear rubber portion of the bumper, although the wiring is in place. Did Jaguar think there was no fog in North America? Fitting the European rear bumper to a North American body is an involved process as everything must be changed: rubber, bumper bar, mounts.... Nor is it possible to simply fit the rubber portion containing the fog guards because it is not deep enough to cover the bumper bar.



Series III North American bumper

On the S3 car, the chrome finisher and the rubber side bumper can be removed as one piece, but the nuts and bolts that hold the bumper to the car are generally seized by this time. A lot of WD40, or similar product, and a lot of time are advisable. In separating the side chrome finisher from the rear central finisher, be careful, very careful, with the studs attached to the S3 finisher. These break very easily if the nut is frozen, so give these extra attention. And just as importantly, when refitting DO NOT over tighten the nut: if you do, you will at the very least dimple the top of the chrome finisher, and at worst dimple it and then break the stud off completely! Fortunately new or used bumper finishers are available. One more thing:

between the side and centre chrome finishers there is supposed to be a fine hard-rubber gasket. This often goes missing if the rear end has been involved in an accident, or the bumper otherwise disturbed.

When the side finisher is removed, look at its underside: you will see the support bar under which you will find an accumulation of mud. All too frequently this mud contains salt-laden moisture, and the result is that the chrome finish on top is ruined, and in extreme cases, there are even holes in the metal. Clean the mud out with a piece of wire, flush, and spray rust-proofing in there.

Previous Page

<u>Contents</u>



BOOT LID

The boot lid is the least well-fitted panel on the XJ and especially in S2 cars and early S3, the lid can sit "proud" of the wings, or not be centred in the opening. There are adjustments that can be made for the side-to-side fitting: the hinge plate bolts can be loosened and the lid carefully refitted; this is a delicate procedure and care must be taken not to damage the paint work. If you do this, use some duct tape on all the opening edges. You must assess whether the degree of misfit is sufficient to warrant the two hours of fitting and refitting necessary.

But the lid which closes "proud" of the wing at the rear end is more easily adjusted. If you remove the inner finisher panel and the rear edge of the boot (a number of screws), then you can loosen the two bolts holding the clamp which in turn fixes the inverted-U shaped latch bar; the bar can then be moved down (or up) as necessary. Keep in mind that these boot lids are meant to be closed by FINGER pressure ONLY. They should never require dropping from a height, and they should NEVER be slammed (Tell your spouse! Tell your children! Don't let anyone else touch it! Impress Mercedes owners by just "clicking" the lid home!). All these XJ cars have a decal fitted to the right side of the inner finisher panel in several languages, warning the owner to PRESS the lid closed, gently.

In this respect, many of you will have evidence that your "previous owners" were either illiterate or blind, possibly both (say, did you know that in the UK, a legally blind person gets a reduction on his television license fee? This seems perfectly sensible to Brits, but to a Canadian this is a hilarious, "only in Britain" situation). The evidence of the PO's illiteracy or blindness is two patches of rust, or chipped paint, near either corner of the closing panel, right beside those cute rubber buffer blocks! The buffer blocks are wedge shaped and the thin edge sits outermost. They are simply screwed into the closing panel and may be removed to clean the panel for concours purposes. The boot lid itself can rust at the lower edge (S1 and 2 cars were worse for this, as the S3 cars had a wax sealant here), especially if the drain holes become blocked. Check that they are open; use RUSTCHECK, WAXOYL or similar in this end panel, and expect that the rust proofing will drip from the drain holes.

A word about the boot badges: improperly placed or missing badges are another sign of re-spray or collision damage. Without getting into unnecessary detail, the Jaguar badge is always fitted to the left side (S1 UK cars had no Jaguar badge here), just above the half way point of the panel, the model (and engine size where fitted) designation to the right. The Series 3 North American market cars carried the 4.2 designation in the '79 to early '81 models. Since this was the only size of the XK engine fitted to these cars, it was clearly redundant, and was thereafter omitted. The V12 cars either had the 5.3 badge or, for Canadian cars, simply the "Vanden Plas" badge, until 1988 when the V12 badge was fitted below it. This badge almost makes up for the fuel consumption penalty, and it is wonderfully impressive when you are followed by a Mercedes or BMW, very few of which can make the same brawny claim. Thorley has photos of the various badge configurations, but again, only of the domestic UK badges. If your car does NOT have the Jaguar badge on the left, OR if it sits further down than halfway, you should suspect accident damage, or inexpert repair. The very latest badges were fitted with adhesive; the earlier ones with pegs.



Late Series III Sovereign

Early Series III Sovereign



Late Series III V12 Vanden Plas

Previous Page Contents







Jagcare III

The chrome bar under the upper edge of the lid on the S3 is supposed to have a rubber gasket under it after the mid-80s. The correct fitting of the two bars, joined by a chromed centre piece, is that the ends curve upwards. The chrome plinth which holds the licence plate lamps also has a rubber gasket, of course , but on S3 cars there is also a black gum sealant right in the centre, around the "hump"; this is factory fitted to take up the space the gasket cannot cover. A good repaint will leave this gum black because it will have been removed with the plinth, and then replaced; this is another good spot to check if you want to verify original paint or a superior paint job.

Within the boot: the S1 and 2 cars have black hardura in the lid concavities; the S3 cars, or most of them, have a hardura panel covering almost all of the lid, fastened with black pegs. This cover can be removed and re-sprayed with black vinyl paint to freshen it. For some reason, the 1982 cars did not have this panel (another '82 anomaly: no map pockets on the rear of the front seats!). Some S1 and 2 cars have black short pile ("velvet") nylon carpeting while the later S3 cars have a beige/brown carpet in the boot and the boot sides; there were variations to the finishing of the boot areas: the standard S1, S2 and early S3 cars had a hardura lining. But the North American cars were standardized to the "top-level" finish for S3. The very last cars had the removable carpet mat with bound edges; earlier cars had straight cut edges for this mat, but NOTE: there are finger slots (half circles) at the rearmost outer edges of the mat for ease of removal. Very often this mat is fitted front to rear. Check yours! If your mat has some "pilling", take a disposable razor and pull it along the surface. It will take up a good deal of the fuzzy excess and give the mat a cleaner look. Many stains on this mat can be removed with a clean cloth dipped in paint thinner.

The jack pouch was black coated material until the mid to late '80's when the pouch was changed to the same carpet material as the rest of the boot. Much nicer. The Vanden Plas cars always had these so a visit to a wrecker may help you upgrade. European cars often were fitted with a very nice hard-cased tool set. These were also provided in the earliest S3 cars in North America but Jaguar came to the conclusion that the typical North American purchaser of a Jaguar had no idea how to use the tools, so this item was soon eliminated. A pity.

The panel which covers the ECU in S3 cars is fixed by plastic "arrow" pins of different form: one with a large washer for the centre fixing, one with a small washer for the left hand fixing. Behind this panel are the ECU, the O2 sensor interval counter on later cars (after '81), the bulb warning units for the rear, inline fuses for the lights, the connection for the high-mounted brake lamp, the sunroof motor... The boot floor contains the antenna motor and relay in the left rear side, the fuel pump and switch-over valve in the centre rear, the fuel filter and check valve in the front right (all of this for S3 cars); the S1 and 2 cars, carburetted, sometimes had fuel tank mounted pumps, and sometimes had two boot-mounted pumps. All of these items are accessed by removing the spare wheel, and unscrewing the rear finisher panel and the wooden support panel; when replacing this please note that the screw which holds the metal support for this panel to the boot floor is a SHORT screw. If it has been replaced with a longer one, or if you are too vigorous in tightening it, you will find that the screw is trying to make its way out the outer valence panel just near the centre rubber grommet!

The cover for the spare tire was plywood up to the early S3 cars, and a pressed chip material thereafter. The clamp for the spare tire had a lever shaped handle for the Kent wheels, and a nut/bolt arrangement for the Ogle "pepperpot" wheels (see below under Wheels). These clamps are not interchangeable because they are of different lengths.

Previous Page

<u>Contents</u>

FRONT END

The following paragraphs are of interest primarily to US owners, but we return to the main topic further on. All of the XJ cars from '69 to '92 were designed to have a large 7 inch outer headlamp and a smaller innner high- or main-beam lamp. US regulations during the production run of these cars required samesize, sealed beam lamps for reasons only bureaucrats know. The fact that the lighting was inadequate, and that the classic appearance of the car was distorted, is apparently irrelevant. The important thing is that the American public was protected from the dangers of excessive foreign lighting. (Canadian purchasers of the early XJ cars also benefitted from this benighted attitude until the Canadian market for Jaguars became large enough to justify the fitting of a different [i.e. original] specification). The very best appearance change you can make to your US-specification XJ is NOT to add a boot spoiler, purple neon ground-effect lighting, two-toning, or fuzzy dice; the best thing you can do is to return your car to Sir William. Lyons' intended design.



Original configuration H4 outer lamps, with Cibie driving lamps

The 7 inch lamps were flat lens in all but the very earliest S3 cars. The change was made to improve the action of the wash/wipe system for the outer lamps, but the flat lens, H4 bulb lamps also give wonderful lighting and look, well, "right". The OEM lamps are Lucas; these often suffer from a rusted bulb cover, giving a dark look to the centre of the lamp. Bosch makes a superb replacement lamp, as do both Hella, and Cibié. These are available at "better" auto supply houses. The other required parts for conversion are 1) a 7 inch bucket, either new or used, as from any British car of the 60's, 2) the rubber gasket that accompanies the bucket, 3) the lamp adjusting ring that accompanies the bucket, and the 7 inch ring that hold the lamp to this adjusting ring. 4) the chrome

"embellisher". Most of these items are available new from suppliers such as Moss Motors, or any other that supplies for British sports cars. The only tricky part is the embellisher, available however, from a variety of sources and suppliers known to this list. The chrome ring now supplied by Jaguar has two protrusions on it at the 9 and 3 o'clock positions. This design was introduced at the very end of the '92 production (my late ' 92 does not have these protrusions), and the change may have something to do with the action of the wiper blade, or with strengthening the casting, although this has not been determined to my satisfaction. In any case, the total conversion cost will be about \$300 or less, and it makes a \$20,000 difference in appearance and lighting.

Installation is a half-hour job. You use the existing wiring. Remove the existing chrome trim, the lamp, the bucket, the US-market spacer piece (which you now discard) and the rubber gasket. Now pry the metal gently out of the existing plastic connector (save the connector); slit the grommet going into your existing bucket, and remove the grommet and wiring. Place this grommet and wiring in the new bucket. Seal the grommet well with silicone. Refit the metal clips to the plastic connector, making sure that the clips end up in the original position in the connector (there are three connections). Fit the bucket and gasket, plug the lamp in, position the alignment ring, set the lamp in its proper position, and finally fit the chrome embellisher. That is it! When night falls, drive the car to a spot in front of a flat wall, and align the headlamps according to the directions that will come with the lamps. You will not believe that you accepted the US lamps as "normal" once you see how the car should look.

While we are on the subject of lamps: the S1 and 2 cars in the UK could be fitted optionally with Lucas (some Cibié in the late S2) driving-fog lamps. On the S1 cars these were fitted in front of the "horn grilles" above the bumper. On the S2 cars they were fitted beneath. The proper lamp for the S3 car is only the Cibié lamp mounted under the bumper, directly below the inner headlamp. This OEM lamp is grounded through the mount and thus requires only one wire for installation. The S3 Jaguar is wired for all possibilities, so your car has the wiring harness already in place (red-yellow wire).

<u>Previous</u> <u>Page</u>

<u>Contents</u>



Jagcare III

While the proper installation utilizes a bracket attached to the bumper bar, this is a UK option. North American cars had no options, the UK bumper bar is different and finally this bracket can be dispensed with entirely. It is a fairly simple matter to drill a hole through the aluminum bumper bar in the appropriate spot (beside the shock mounting access), and the fit the lamp that way. To do both sides will take no more than a half hour or so in total.

Alternatively, you may fit other driving or fog lamps such as the Bosch Pilot. These do not suit the car in appearance quite so well as they are more rectangular, but they work fine. There is a slight complication in that these other lamps require a ground connection. You can make one quite easily at almost any existing attachment point on the radiator support. You will also need to modify the connectors to mate with the existing wiring harness, but all of this will add no more than another half hour to the procedure.

When dealing with the dashboard I will tell you how to enable the main lighting switch for these lamps, and how to activate the fog warning light when these lamps are on.



Previous Page

Contents

Next Page

88 V12 Vanden Plas



GRILLE

The grille is easily fitted and removed, as it is only held in place by a number of nuts. Remove these and the grille can be carefully pulled away. You will be amazed at the dirt found under it and behind it. You will now have access to your radiator for cleaning. In the Series 1 Daimlers, and all the Series 2 and 3 cars, before replacing the grille, add a foam self-adhesive pad to each top corner (picture hanger adhesive tape is good for this; just leave the plastic on one side, the side that will contact the paint). The purpose of this pad is to prevent the grille from coming into direct contact with the paintwork, etching a scar into it, and leaving a place for rust to form; chances are it has already done so at the top corners. The grilles do already have a thin rubber pad along the top edge but it is not sufficient to prevent damage.



Leaper placement

Let's talk about Leapers (the leaping Jaguar figure) while we are here. I like them although others prefer the naked look of the bonnet without them. They were never fitted to the XJ saloon, principally because of existing regulations in various markets designed to protect pedestrians, the ones that Jaguars were presumably stalking. They were, however, a genuine Jaguar item for fitting to the XJ and were sold by dealers for installation at the owner's request. They look good when properly placed, and when they are the right size. The right size is the small size; the large size, as I have said elsewhere, tells the world that you (if you are male) have a problem with what is in your pants. The Leaper front base edge should sit

back 4 inches or so from the REAR edge of the grille. The Leaper should NOT overhang the "Growler" (Jaguar head) medallion on the grille. It is a good idea, no, a REALLY good idea to make a gasket of some kind for the Leaper base; an old inner tube can serve as a material source, although I use rubber grommets to fit over the bolts. The Leapers are available both from Jaguar dealers (who, in addition to the usual leaper, can also supply the spring mounted Leapers fitted to the newer Jaguars; be careful though: the correct size is the one Jaguar has fitted to North American S- and X-Type cars, NOT the large one fitted to the late XJ6 and XJ8 ['95 and later]). The original style Leapers are also available from Jaguar and any number of aftermarket suppliers, although the quality of the product can vary, and some of them even include the gasket. If so inclined (and I hope you are not so inclined), you can even fit a gold plated Leaper!

The horns are located on the early XJ on the subframe, then on the engine mount plate, but on later S2 and S3 cars behind the bumper centre. If your horns do not work, first verify the spade connections. The next most likely failure is at the in-line fuse located just above the battery (LHD cars). If your horns are hopelessly corroded inside, they are easily replaced; Italian FIAMME horns fit perfectly and sound terrible, and terribly Italian (if you like the sound of a Fiat's exhaust, however, you may like the Fiamme horn; but if you like the sound of a Fiat's exhaust, you must have bought a Jaguar by mistake!). If your horn sounds without interruption, or sounds intermittently, the problem is in the steering wheel connection. The wheel pad is easily removed: (two screws reached from behind the wheel). Access is improved by pulling the wheel out to its furthest extension. Once the pad is removed, you will see a plastic nut (21 mm head, I believe). This is attached to the horn rod, which ends in a plastic sleeve. This sleeve should be lubricated with grease. Once the rod is removed you can go further and remove the wheel itself if you need to reposition it for centering. The metal nut that secures the wheel is the same size as the plastic rod nut. When you remove the wheel itself (you may need to tap it to loosen), you may

find that the two-piece collet falls to the floor. No problem; just replace it with the tapered side closest to the driver. Assembly is the reverse of disassembly, as the manuals say, but if your horn sounds all the time, check that the metal contact clip on the pad is not bent too far out. This would make it contact the rod all the time. Likewise, if the horn is hard to sound, you may want to gently bend the contact clip out a bit. See the end of the book for a recommendation concerning steering wheels.

Previous Page

<u>Contents</u>



FRONT BUMPERS

The front bumpers are much easier to remove than the rear units because the fixings are usually less corroded. The fixing points at the side-front are fairly straightforward, although I have found that the charcoal canister gets in the way of removing the bolt on the right side. But it can be left in situ. Another sign of a less than \$5,000 repaint is that the mounting washers and the rubber spacer will have paint on them. Once removed, they are easily cleaned up.

Parking lamps on S1 cars are mounted on the body above the bumper; on S2 cars both for North America, they are mounted below or in the rubber, and for UK and other markets, they are also mounted below. On S3 cars they are integral with the rubber bumper. For removal on S3 cars, ignore the screws visible at the front of the lens. These were added by Jaguar engineers to fool gullible colonials. They do not give access to the bulb, but they do fix the entire unit to the bumper. If you are in a concours mood, removal of the entire unit will allow you to clean the recesses of the rubber cavity and also allow you to use some polish and then wax on the plastic lens (it makes a difference!). The bulb itself is removed from the rear of the bumper by simply turning and pulling.

Again for S3 cars: the black plastic spacer between the bumper and the body at the front looks much better when treated with ARMOR-ALL or some similar product. The bumper mounting bolts are supposed to be hidden under two plastic caps held into this spacer by plastic pegs. These caps often go missing in cars which have led less than a sheltered life; if they are missing, suspect front end damage, as these are often lost by body shops.

On all series, there is under the bumper a secondary grille, easily removed by a couple of screws; once this is out, you can remove the two rubber grommets in the valence (on S2 and 3 cars; these holes were to provide access to the V12 oil cooler lines). These grommets are black, and should always be black. If yours are not, your car has been repainted. With the lower grille removed, you can hose out this front valence which can collect a surprising amount of débris and can in fact rust badly. The S3 car at least should have an under-body pan attached to this valence.

Previous Page

<u>Contents</u>

BONNET

Much has been said on the Jag-lovers list about the latching pins at either side, so I will not repeat the adjustment procedure. Failure to latch on one side is generally the result of a PO or mechanic (not you, of course) not closing the bonnet comme il faut, and thereby distorting it. Comme il faut is thus: stand at the front of the car. Put one hand under the centre top of the grille (under the Growler escutcheon) and LIFT smartly. How smartly, depends on the state of your latches and hinges. This procedure closes the well-balanced bonnet evenly and securely and impresses Mercedes owners no end. Do NOT under any circumstances allow anyone to close the bonnet by pressing at one of the top corners. Tall people may be able to reach to the middle of the bonnet and push down, but this is not the elegant, "show-off" (and therefore preferred) method of closing an XJ bonnet. In any case, until you are confident, after closing it is good practice to confirm that the latch has been secured by pressing down about 8 inches from the cowl end. You will be able to feel the pin in the latch.

If your bonnet will not release, there is a rubber plug (mentioned in the section on wings) located up in the wheel well under the latch. Remove the plug, stick a screwdriver up and pry (prise for Brits) the latch back. The bonnet will open. Always carry a screwdriver in your jack pouch.



Canadian specification washer nozzles

Later S3 cars for Canada only ('87 to '92) had the windscreen washer nozzles located in the bonnet (two separate units), whereas earlier models had a single unit, either chrome or black plastic, in the air intake grille. Jaguars for markets other than Canada continued with the nozzle in the grille. Neither type is preferable. All work fine. Note that the "arms" of the single nozzle unit point AWAY from the windscreen, the opposite of what your intuition would indicate. If your windscreen washer pump is inoperative, fear not. A generic unit can be purchased anywhere, and will fit and work just fine. On S3 cars the pump is located near the reservoir and covered with a domed rubber cap.

The air intake grille on S3 cars is held in place by a peg at each end, in about 4 or 5 bars from the end. There is a metal screen beneath and attached to the grille. Pry gently to release the grille, but protect the paint as you do this. Make sure the plenum below is clear of debris. The plenum drains open into the engine bay by means of rubber tubes. Concours note: the body beneath the grille is painted matte black within the depression on light coloured cars (another sign of Jaguar's attention to detail). Again, if yours it not, it is a sure sign of a repaint.

The wiper arms: until 1981 the wiper arms and blade frames on the XJ saloons were satin-finish bright metal. Thereafter these parts were painted black to minimize reflection. The original wiper blades for the S3 Jaguar are Bosch-branded; the blade frame has a series of elongated holes in it. There are after market blades that look similar. These are properly 15 inch blades, and earlier cars used shorter blades. Note that the wiper arms for the S3 are not identical for both sides. The driver's side has a slight bend to it about 3/4 of the way along to position the blade further down the screen. This arm is also slightly longer than

the passenger-side arm. The LHD and RHD cars have the wipers park on opposite sides of the S3 car, always away from the driver so that they do not block his vision when not in use. In the mid 80's Jaguar changed the type of mounting for the blade. Instead of having a pin mount (and therefore having the blade sit above the arm), there was now a clip mount so that the blade sat in line with the arm. At the same time Jaguar specified a slightly higher park positioning for the wipers; the positioning is found detailed in both the Repair Manual and the Haynes manual. I prefer the earlier positioning on all my cars; partly because I have found that the wipers NATURALLY park higher than the lowest park position due to friction on the glass, and secondly because I rarely use the wipers, and simply want them to be as unobtrusive as possible.

<u>Previous</u> <u>Page</u>

<u>Contents</u>



Jagcare III

Mine are positioned so that the driver's side blade sits almost down on the rubber seal; this means that the passenger side blade (which is always higher) sits so that it overhangs the stainless moulding by a 1/4 inch or so. This is correct "earlier" positioning. A look at any number of official photographs will prove that the wipers in fact stop at different park positions. The wipers can easily be repositioned according to your own preference, the overriding concern being that they do not foul each other as they start operation.



Typical wiper overhang

If your S3 wipers arms could benefit from new paint (black, after '81), I have found that black vinyl paint (the sort you use to re-colour vinyl) has exactly the right sheen and is very long-lasting. Remove the arms as described below. A note about the S3 wipers. These wipers are a major improvement over the S2 system, and offer high, low and intermittent speeds. The wipers are supposed to park when switched off from any of these settings but a good percentage of the S3 cars on the road will have wipers that park only in the intermittent mode. If yours is like this, the fault is in the column switch, NOT in the park switch on the wiper motor. Although this column switch can be replaced, it seems simpler and less expensive to

simply switch off by going to the intermittent mode first.

To reposition or remove the wiper arms, simply open the plastic cap that covers the nut (these are rather fragile, so exercise care; the cap can be removed entirely as it just snaps into place); undo the nut, pull the arm away from the screen, and wiggle it off the spindle. Reposition as desired, tighten the nut firmly, but not too tightly as this can educe the "endfloat" and cause noise in the mechanism. If you are repainting, the wiper spindle covers should be removed. This is an easy procedure. Once the wiper arms have been removed, you must also remove the larger nut that holds the satin-finished (chrome in earlier models) cover in place. The cover comes off, along with the plastic washer below which sits against the body. This is so easy that it amazes me to see cars that have had these (badly) masked for painting. The air grille, of course, comes off before removing the spindle covers.

Now, for those having water entry to the cabin: the spindle holes were a known water entry point. Jaguar did pay some attention to this once the fault was made known, but it may be worth your while to make sure that everything is sealed here, and on replacing the spindle cover and washer, a thin bead of silicone sealant under the plastic washer might be a good idea.

Previous Page

Contents



SUNROOF

(Dealing here only with the outside portion, not the operation thereof.) Repainted cars often have overspray on the rubber gasket. The sunroof panel is very easy to remove: open partially, remove the four screws at the front edge, pull the panel forward and remove. It is held at the rear by tabs that slide under spring clips, so replacement is quite straight forward. It is a good idea to put some of man's best friend (duct tape) in strips on the top of the panel before removal to ensure that you do not damage the paint in lifting it beyond the roof edge. Once the panel is out, the screws that hold the gasket in place can be removed. This process removes only the outer panel for re-spray. The inner panel remains in place so there is no question of damaging the interior.



88 V12 Vanden Plas

The sunroof rarely gives any trouble. It is a good idea to open the roof, clean and lightly grease the metal slides. The motor is located at the centre of the rear seat panel with the gearbox and cables mounted on the seat side, the motor on the boot side. For emergency operation in the event of a battery failure, the cars were provided with a miniature alloy crank which fits into the bottom of the motor.

Previous Page

Contents N

<u>Next Page</u>



GLASS

The S1 and 2 cars use a similar seal for the front and rear screens, but the North American S2 cars had additional retaining bars added on the windscreen moulding. There are not any unusual problems with the seals on the S1 and S2 cars, other than the seals hardening and cracking due to ozone damage, sun, etc. It is always a good practice, for all rubber parts on the car, to use a silicone emulsion regularly. This used to be available at any auto parts store in a bottle with a "shoe polish" dauber. It is now hard to find in this form, but GM does still have this as an "over the counter" part. This is good to use also on the door rubber seals. Another good preservative is Leatherique Prestine Clean.

I will concede mighty few design flaws in the S3 cars, mighty few. But one I will confess, is the design of the front and rear screen seals and channels. These are designed to guarantee rust formation within a five year period because water, often loaded with salt dust and dirt, enters around the seals (and I think it is at the top of the screen because I find water running down under the side seal). The water can sit under the seals for weeks, as I have proven to myself. No amount of coaxing, squeezing, pressing, vacuuming (yes! you can see how obsessive I am. I am the person you WANT as a PO!), car angling (raising one corner of the car to encourage the water to "flow"), thumping the cowl panel - none of this guarantees getting all the water out. The eventual result is bubbling at the bottom corners of the screen area, and in more severe cases, all along the bottom, and in desperate cases, along the side (the "A pillar") as well. If this situation is allowed to deteriorate, water will end up entering the cabin area.

The real reason for all of this is that it would simply have been too messy on the assembly line to do what is really necessary. On the assembly line they applied a thin bead of sealant, enough to keep the seals in place, but not anywhere near enough to leave no room for water. How much is enough? Enough that the sealant is displaced all over the paint work as the seal is fitted. Jaguar modified the shape of the outer (stainless to paint) seal twice. The first version was of a fairly narrow cross-section, more or less equivalent to the cross-section of the inner (glass to stainless) seal, although the shape was different.

By 1984 the cross-section was increased so that a relatively wider flap overhung the painted area. This was increased yet again, and the seal you get now from Jaguar is noticeably wider than the original early Series 3 seals. The effect of the increased cross-section, however, has simply been to hide the bubbling a bit longer. However, there is some evidence that Jaguar's rust-proofing and/or sealing techniques improved for the later cars. I have seen many Jaguars of '87 and later vintage with no sign of corrosion here. Removal of the front screen in my '92 car for a bare-body respray revealed not one speck of corrosion in the channel, and this was a car which was given no special treatment before my ownership (hence the respray!).



1987 V12 Vanden Plas

But for those with cars that do have bubbling at the screens, the cure is to remove the front and rear screens, replace the corroded sections (this is sophisticated work because of the curves involved), repaint, and fit new seals. The main seal upon which the glass sits is generally reusable; what you need are the glass-to-stainless and stainless-to-paint seals. The stainless trim costs the same as a small bungalow in a relatively tony neighbourhood, so you want a skilled glass man to remove it without denting it. Most importantly, you want a glass man who understands the nature of the problem and is not afraid to literally fill the channel cavity with sealant before fitting the outer seal.

Previous Page

<u>Contents</u>



The inner (glass-to-stainless) seal is one you can, and perhaps should do yourself. Both the outer and inner seals shrink with age and heat; but as the outer seal shrinks, it pulls more tightly around the stainless, sometimes leaving a gap that can be as much as an inch or more where the ends are joined. This is not so much of a problem because a filler piece can be used (the new seals are excessively long, and are cut to fit: do NOT let the glass man discard the excess!).

The inner seal is another matter. As it shrinks, it pulls in from the corners. This means that the bottom corners of the screen are not sealed at all and water sits in that area, finding its way down to the channel. 85% of you reading this, if you examine your cars, will find that the inner seal is loose at the corners (worse, the cavity under the seal is full of dirt). What to do? Refit! Remove the seal from all but the top centre portion. Now, using some silicone sealant, fill that space between glass and stainless. Fit the seal in place and when you come to the first upper corner, PUSH against the part already fitted, all the way 'round the corner; do the same at all four corners. You will now find that you have a space at the bottom centre of about two inches. That is how much the seal has really shrunk since the car was built. This space is ideally filled with a replacement piece which you have got from a wrecked Jaguar; alternatively, you can fit an entirely new seal, which will be long enough that there is no gap. Please be aware that this is MESSY work. Cover the paint work as much as possible. Have paint thinner handy, and cloths. This will remove the silicone sealant from the glass and the stainless while it is fresh (and even from the paint work: the thinner, in my experience, does not damage the paint, but does remove the wax, so be prepared to re-wax these areas). When you have done this you will really feel satisfied that you have done everything in your power to keep the water out. Of course, the sad truth is that you will not have succeeded completely, but you will have minimized the damage and lengthened the time until the screens have to come out again.

My latest, and I think most effective technique: I accept that the water is under the seals. This acceptance has been a struggle for me, but I have conquered my fear of the underseal issue. Having faced the devil, I can now deal with it. Given that the water is there, what can be done to protect the metal from the effect of the water, dirt, salt? I have reasoned that if the water can get under the seal, then the thinner rustproofing can as well. So every couple of months I apply a bead of Rustcheck along the top seal/body joint. Left overnight, this bead of rustproofing has seeped UNDER the seal. After a day, it begins to leak out from the seal at the bottom of the screen. As it displaces water, it is actually coating the metal. I also apply a bead long the seal/stainless joint at the bottom of the seal, reasoning that if there is any path through there to the channel cavity, the rustproofing will do its job as well. This particular rustproofing is harmless to paint, rubber, or any other component of the body, and can simply be wiped away. It does attract a certain amount of dirt, as this is useful for tracing its creeping progress.

Glass: I have found that the very best thing to both clean and shine the glass is my favourite, carnauba wax. Much easier than the news-print procedure, and an additional benefit is that the dust and dirt don't cling. In fact, the use of wax on the windscreen virtually precludes the use of the wipers at highway speeds. Much better than Rain-X or similar products. It does not interfere in any way with wiper operation, nor does it cause streaks. This treatment also decreases the friction between the rubber wipe and the glass, helping it the wipers to move smoothly. I also use the carnauba on all other glass areas, and often, on the rubber outer wipes of the side windows to decrease friction and to keep the rubber in shape.

Previous
Page





A concours tip: the rubber seal at the base of the rear door quarterlight has a channel in it. This channel collects dirt as well as water, and a toothbrush dipped in something like Armor-all (or even better, Prestine Clean by Leatherique) will not only clean it out, but leave the rubber looking new. The corners of the window wipes on the doors also collect dirt; the same procedure can be used there. The original glass in these cars is Triplex, so if your front screen doesn't have the XXX, it has been replaced. All export S3 cars to North America had Triplex Sundym tinted glass, not banded at the top of the front screen, although replacement screens are available that way. Some Australian and New Zealand cars, strangely, did not have tinted glass.

<u>Previous</u> <u>Page</u>

Contents

WHEELS

The Series 1 cars used steel wheels for most models, and the cars imported to North America all had the wheel trim rings ("embellishers": literally the "beautifiers") and narrow whiteband (not "whitewall") Dunlop SP radials designed specifically for the XJ. These same cars were all equipped fully with items that were optional in other markets: electric windows, electric antenna, air conditioning.... That was the start of the "Options: none" Jaguars in Canada and the US. Beginning with the Series 1 XJ cars, the intention was to present one level of equipment for this luxury saloon: the highest level. The S1 Jaguar in the US and Canada easily outclassed the Mercedes in this respect, and the advertisements of the time invited a direct comparison. This tradition carried through to the S2 and S3 cars, and there is an obvious sense of pride transmitted in the perennial brochure line: "Options: none".

The same whiteband tires were used on the S2 but the wheels were now the "turbo" chromed steel wheels, which were optional in the UK and elsewhere. The S3 cars in '79 and '80 had steel wheels in Britain as well as in North America, fitted with stainless-steel wheel covers. The North American cars continued with the whiteband tires in a size equivalent to 205/70-15, optional in the UK. But for 1981 the optional Kent wheel became the standard issue for Canada and the US, and I believe Australia and New Zealand, but I am subject to correction on this point. (The tires were changed to Pirelli P5 tires, 205/70-15; later the XJ112 carried 215/70-15 and the same tire could be used on the XJ6). The Kent alloy is still a beautiful wheel. It was used previously on the V12 XJS and the S2 XJ12 cars in North America, but polished, not painted. Now it was in the painted (and clear-coated) form.



Close-up of Kent wheel

Close-up of Pepperpot wheel

present I have the Kents on my white '82 XJ6, with whiteband tires, which are especially good because they "lift" the appearance of the white body. I also have tires with a narrower whiteband (Michelin X-one) on my '87, '88 and '92 V12 cars, Both have the Ogle "pepperpot" wheels, and I think, look superb with the whiteband tires setting off the dark paint.

In 1982 the Ogle "pepperpot" wheel became available as an option in the UK and was fitted to the Sovereign range at its introduction for the 1984 model year. The Kent wheel was the standard fitting for the Daimler Double Six and Vanden Plas. The UK wheel situation is far more complicated than the North American. Where the Kent wheel was standard on all Jaguars through the S3 sales period, except that in Canada the Sovereign in some years carried the "pepperpots", and in others it was the V12 Vanden Plas that had them. As late as 1992 the standard wheel for the V12 was the Kent. In other words, there is no obvious "superiority" to the "pepperpot" wheel; the flagship Daimler Double Six always carried the Kent wheel unless the owner specified a preference for the Ogle wheel. The US situation is less clear: "pepperpots" are certainly seen in the States, but

I don't think they were supplied on any of the XJ6 S3 cars there as standard issue. And it must be remembered that the US Jaguar line in the S3 period was confined to 6 cylinder models; sales of the S3 ended in the US in the spring of 1987.



1987 V12 with 'pepperpot' wheels

XJ6 with 'Kent' wheels

How to care for these wheels: obviously they must be kept clean. The front wheels are subject to brake dust accumulation, which in some cases can become baked on to the wheel. The "pepperpot" wheels are especially troublesome in this regard since the brake dust collects in the holes, and care must be taken to clean them regularly. I had to resort to scraping the brake dust out of the holes on my '84 Sovereign. The PO had not bothered to wax the wheels, which would have prevented much of the problem; it is the best protection you can give. If you have the Ogle wheels, an occasional quick cleaning is useful. Don't fuss: just take a rag and bunch it around your index finger. Use this to wipe the inside of the holes (if the wadding is sufficiently thick, just a quick poke is sufficient). This will prevent the "baking" of the brake dust and make them much easier to clean.

<u>Previous</u> <u>Page</u>

<u>Contents</u>






You need do this really on the front wheels only. The brake discs are inboard at the rear, so the problem of brake dust accumulation does not exist there.

Use a good quality cleaner wax on these alloy wheels; For this purpose only, I prefer Mother's Carnauba Cleaner Wax. It contains just enough abrasive to clean the scum and brake dust, after washing. I do NOT use this wax on the body paint, preferring a non-abrasive carnauba. Because the "pepperpot" wheels are of one colour, they are quite easily painted if necessary without removing the tire. I did this experimentally on one of the Sovereign wheels, and in two years' use it showed no sign of deterioration. There are "alloy wheel" paints commonly available. I simply sprayed both front and back of the wheel, paying attention to the holes, having masked off the tire and the rubber valve. Once dry, I used my beloved 3M Finishing Polish (#39003) to smooth the paint to a nice gloss, and finished with a couple of coats of wax. The Kent wheels, however, are not as easily dealt with. The dark gray inner portions would need masking. I have seen Kents completely stripped of paint and polished. I have seen Kents on which the dark grey portion was painted to body colour; in one case to gold; in another, to red. Some US dealers apparently had the Kent wheels chromed, but I have not seen any of these (chroming an alloy wheel is difficult and often not durable). In my opinion, none of the variations I have seen look as good as the original. Another case in which Jaguar got it right the first time, and efforts to "improve" generally fail. Some of you may prefer colour modifications to the wheels, and that is your right.

The centre caps: the early wheels (S1 and 2) have a chromed centre hubcap with a Jaguar growler or a Daimler D. These often suffer pitting and even rusting in extreme cases, but are fairly easily re-chromed. The S3 stainless covers fare well, the only problem being that the black paint used in the centre section can flake off. The Kent wheels use a centre cap with a plastic Growler badge. This badge is attached with a thick dob of glue, which can dry out; in that case the Growler goes prowling. The cap itself is held to the wheel by a three-pronged clip. In some cases the clip detached itself from the cap. Replacement caps are available, but they are NOT identical to the originals, although from 4 feet away they look almost the same. The difference is in the sharpness of the ridges, very noticeable on direct comparison. As usual, the original is superior. The pepperpot wheel uses a black plastic bezel which is snapped into place, and holds a black and gold Growler. By the way, many of you will have grille badges and wheel badges that appear to be silver on black. This is NOT original. They started life as gold on black but exposure to sunlight causes the gold to fade to silver. I have had several warm discussions with people, even people who should know better, claiming that these are properly silver on black. The early S3 XJ12 had a grille badge that was gold on gold, but by '84 all the badges were the same. Similarly the S1 and 2 and even very early S3 front wing badges were gold on black for the XJ12, and silver on black for the XJ6. The silver on black was later extended to the whole range.

The "pepperpot" wheel requires a different wheel retainer in the boot. It is significantly longer than the one for the Kent wheel because the centre portion of the "pepperpot" wheel extends further from the hub.

The wheel nuts for the alloy wheels were chrome until '84 at least, changing then to an alloy-covered nut. Both are the same size, and interchangeable. It is almost inevitable that the chrome finish will deteriorate, with the edges being chipped away when a power wrench is used. You can have the nuts rechromed, which will often result in a better-than-new finish, or you can purchase new ones (the Jaguar nuts being very expensive) or you can opt for the later alloy-covered nuts. These take a really good shine if metal polish is used on them. Previous Page

Contents

The Kent wheels benefit from rechromed wheel nuts as the entire nut is exposed. "Pepperpot" wheels leave only the end of the nut visible. It is important not to over-tighten the wheel nuts. 60-65 lb-ft is an upper limit. When leaving your car with a garage, ask that they tighten the nuts using a torque wrench.

The wheels should be removed periodically, at least once a year; if they are not, the alloy wheels tend to "freeze" to the hub. Removal can then be a challenge, involving the use of a rubber mallet. When your wheels are off, put a smear of copper grease on the wheel where it contacts the hub and the brake disc to prevent this problem.

Finally, for those REALLY interested in appearance: the alloy wheels can carry their balance weights on the INSIDE, so that there is no disfiguring of the outside. You may have to insist on this, but it can be done. Both my Kents and my "pepperpots" are done this way, and they are well balanced. If you need to remove the sticky glue residue from old weights, you can use a wooden scraper (steal one from the kitchen as I did) and some GOO GONE, but even more effective is commercial brake cleaner. This does not harm the finish of the wheel in any way, but the vapours are toxic, so it must be used in the outdoors.

<u>Previous</u> <u>Page</u>

<u>Contents</u>

EXTERIOR PAINT

Few of our Jaguars are sitting in their original paint; those that are often will show signs of deterioration such as the checking in the clearcoat of the early to mid-S3 models. Each one of us will have some way of dealing with or ignoring this condition. Some time ago a suggestion was made on the Jag-lovers list of rubbing transmission fluid into the paint. I have no idea of the long term effects of this treatment.

My own '84 Sovereign exhibited some checking on the bonnet, although the rest of the cranberry paint was excellent and this is how I dealt with it. I took 2000 grade wet/dry abrasive paper (this is not for the faint of heart), and using water as a lubricant. I gently rubbed in one direction. As I did this I could actually feel the edges of the checking smooth out. I rubbed until the finish was smooth and completely dull, doing a small area at a time. I then took the 3M Finishing Polish (#39003!) And rubbed until I had a mirror-like finish. I proceeded to do the entire bonnet, and finished with two coats of carnauba. The result was brilliant and appeared perfectly smooth, although when viewed closely from above, the checking was still slightly visible. In any case, this procedure produced at least a 90% improvement in appearance. My other cars have had excellent clearcoat finishes; my white '82 because it has been resprayed; my Crimson '88 V12 and the Alpine Green '88 V12: the paint on these was/is original and superb. Obviously Jaguar worked on improving the paint finishes substantially.



On finishes like this it really is worthwhile using a top quality, nonabrasive carnauba wax. on an original checked finish it may be a waste of expensive wax, although I have done it. Any brand of carnauba will do, although some are easier to apply and buff out than others. I like the Eagle 1 formulation,

1984 Sovereign XJ6 in original Cranberry paint.

but I have also used Mother's and Classic; all of these non-abrasive, or non-cleaning formulations, safe for clearcoats. More importantly you can apply as many coats as you like. This wax is all-purpose as I have said; use it on the paint, on the chrome, on the glass (headlamps too), on the wheels, on the plastic badges and on the rubber, and don't forget the wood and chrome inside! Your car will never look better. The waxes all have some sort of chemical solvent that helps to breakdown road film, so they have a gentle cleansing action and can remove road tar, bugs, etc. Once you have several coats of this wax on the car you will find that the car stays cleaner, and comes clean more easily. There is another wax I like very much: Zymol.Carnauba liquid. It is a very gentle cleaner wax, very expensive, although it goes a long way, and perhaps is the only wax I have found that can better the paste carnaubas in terms of brilliance of shine and deepening of colour, but it is more difficult to buff out without streaks, especially on dark colours. A concours note: a soft toothbrush is indispensable for clearing wax residue from around the rubber trim, and especially around the exterior door handles on the S3 cars.

Let's talk about washing: now here is a problem: the most effective and safest way to clean the car is to use LOTS of water. But, especially if you have a S3, you don't want to force water under those screen seals. Every one of you has your own way of doing this; my solution is not one that everyone can adopt. I am able to keep my cars in the garage when they are not actually in use. This eliminates not only the damaging effects of sun and heat on the wood and leather, but keeps the cars quite clean. Since I try not to drive them in wet weather (I can hear what you are saying...), I am able to rely to a great extent on the "California dust buster"; this is a paraffin- impregnated mop. For years I eschewed this option. I was certain that running this over a dry surface would scratch the finish (NOW HEAR THIS: the WORST thing you can do for your Jaguar, in several ways, is to take it to an automated car wash: recycled and possibly salty water, grit in the brushes, water forced into the seals, scratched paint....Stay away from car washes!). But I came to be a believer when the paraffin mop was used on my Sovereign; the road dust came off, and there were no scratches. I now use it regularly between washes on all the cars. My son has taken to using it on his MGB!

Previous Page

<u>Contents</u>

My practice, because I am paranoid about the screen seals, is to wash only the portions of the car away from the screen. I use the paraffin mop on the roof, and a wet sponge afterwards so as to get only a minimal amount of water (preferably none) near the front and rear seals. The rest of the car can be liberally soaked. Don't forget to wash the front and rear valences under the bumpers, and to clean the stainless exhaust tips (as noted above, these take a wonderful shine with metal polish and a coat of carnauba). I dry the entire car with a cellulose sponge. There are two kinds of sponge: the cellulose kind that works, and the (even more) synthetic kind that doesn't. How can you tell the difference? Easy: the kind that does NOT work has very even-sized holes, very tiny, and a sort of slimy feel to it as well as a slight shine. The kind that works has irregular perforations, much like a natural sponge, and in absolutely dull. Hard to describe, but easy to differentiate in practice. The good kind is more expensive, of course. Then there is the natural sponge, and that does work, but it seems an extravagance for car washing. A sponge works faster and more effectively than a chamois, at a fraction the cost. Don't forget the inside of the door areas: the jambs and sills. The S3 car retains water under the trunk chrome finisher as well, so it is a good idea to open the trunk to let that water drain, and to open the doors as well to let the water escape. Finish with a coat of carnauba, all over; vacuum the interior (actually, best done before washing), and stand back for an hour or two, walk all around the car, watch how the light plays off those beautiful flanks, notice the care Jaguar took to get the design details just right....you know the drill because you have all done it.

> Previous Page

<u>Contents</u>

INTERIOR

The dash

The XJ saloon basically has two styles of dash. The S1 and the S2/S3. The S1 dash is extremely attractive to a lot of us: very English; lots of switches in a handsome row. An ergonomic nightmare, they say, but have you seen a Porsche dash lately or for that matter, a Rolls Royce? The walnut on the S1 cars generally holds up better than that of the S2/S3 and is easier to refinish if need be, because of the type of gloss employed. It has and had a softer, less shiny surface, and is matched by those handsome wood caps on the doors. All of these can be removed and refinished as necessary. The first S1 cars had chrome rimmed instrument bezels, later changed to black. The dash top had a radio speaker in the centre, and moveable defroster vents; otherwise it may be interchanged with the later tops ("crash rolls").



1987 V12 Vanden Plas Dash

The S2 and S3 cars use the same, improved design of the dash, with switches more conveniently placed. The S2 and early S3 (to '81) had a metal (not plastic) silvery beading along the bottom just where the lower padded edge abuts. This is unnecessary frou-froufery as Jaguar saw clearly, and it was removed for '82, giving a much cleaner appearance. The S2 cars had silver rims to the instruments; rather cheap looking, it was said, and this was wisely abandoned for the S3 cars. The dash pads are the same, although the defroster grilles were fixed rather than directable, and the S2 and S3 cars do not have a speaker griller in the pad. The defroster grilles are held in place by four plastic pegs, which often break. The correct

placing of the grille is to have the broader border toward the driver.

The map light is recessed under the lip of the centre portion of the dash top and does NOT carry a lens. It is removed by squeezing the tabs at either side. The dash top itself is held by a number of screws under the lip, and by the end plates (2 screws). Once these are removed, the top may be taken out of the car. The map light must be pulled down and disconnected (be careful not to touch the end to any metal edge of the dash or you will blow a fuse; on the S3 cars the climate control cabin temperature sensor must be pushed through its mounting hole, just above the glove box door). Removal of the dash top will allow you to see how nice and thick that dash wood is; the finish veneer is just that, a micro-thin mirror-matched piece applied under tremendous pressure to the base of birch and/or anigre wood to minimize contraction and expansion.



87 V12 VDP dash; late Series III sports wheel

The dashes are hand finished, and each one bears the name or initials of the person who finished it, and the date. How many Lexi (surely this is a Latin word?) can claim as much? The enemy of your dash is the sun. Keep the car out of the sun as much as possible while you are not driving it, and if it is to be left outside for the day, try to position it so the dash gets a minimum of sunlight. A true Jaguar-lover will not consider this to be eccentric. Every one of these dashes left Coventry very dark; every one. Only some XJS cars had light wood (elm) dashes, but all the dashes have lightened to one degree or another; some have become very blonde, and the owners refuse to believe that they

were ever dark (they were). The XJ6 had straight-

grain walnut, the Sovereign and Vanden Plas models had figured or burl dashes. New ones can be had from Paul's Jaguar if you want the real thing; other companies such as Prestige make after-market replacements, some very beautiful. For '83 and later cars, however, the situation is slightly more difficult, that is to say, more expensive as the console pieces will also have to be replaced to match.

> <u>Previous</u> <u>Page</u>

<u>Contents</u>





The '82 and earlier S2 and S3 cars can be updated by replacing the alumin(i)um switch panels and radio/AC panel with veneer replacements. Very handsome indeed. I have these on my '82 and this change takes at least 10 years off the age of the car.



82 dash/console with additional wood pack and late Series III sports wheel

You CAN fit a new dash yourself; I have done itseveral times, and I have less than average abilities. You simply have to be slow and careful. The trickiest bit is the fitting of the glove box door, but there are several adjustments and we had a posting about this. This door should "click" into place with no binding. It should NEVER be slammed. Nothing on a Jaguar should be slammed shut. You may find that when open the door angle is not propitious for milady to adjust her face in the mirror (listen, I didn't invent that. The 1983 US XJ brochure reads "A beautiful car deserves beautiful passengers and for their benefit we have included this convenient make-up mirror"). In any case, I have found that a rubber bumper placed in the end of the hinge slide of the glove box door, not only softens the landing, but also makes the angle of the door, when

open, more correct. Any rubber grommet, cut to fit, will do.

The instruments are easily removed: LHD cars turn the large instruments an eight turn counter-clockwise; RHD, clockwise, and remove. I have found that it helps to remove the central warning lamp lens on the S2/S3 car. That gives you better purchase for twisting the large gauges. The small gauges can then be removed by sticking your hand in and feeling for the knurled nut which holds the clamp, which in turn fixes the gauge to the panel.

The panel lights often seem too dim. But there is a rheostat located below the ignition switch on cars to' 82 and on the computer panel for '83 to '92 cars. This is provided so that the owner can make the lights even dimmer. These cars are British. That is the end of the story. It may help a bit to clean the bulbs, but really, you are supposed to be watching the road, aren't you?

The end vents cannot be removed from the front of the panel. They are held in place at the rear by a very ingenious and maddening clip, also of English invention and manufacture. The centre vent is duct-taped to its tube, but the tape is superfluous (as it is on the end vents), and once it has been removed, the vent can be put in or out at will. It is quite secure with just a pressure fit.



Standard Gauges

Recessed Gauges

This may be the place to mention again that the Vanden Plas dashes look the same as the Sovereign dashes, and (apart from the

grain) as the XJ6 dash, but they are not. All of the instruments, the vents, and indeed the lower edge pads, are slightly recessed. The veneered surface is cut away to permit this; it is such a slight difference, undetectable to all but the most obsessive observer, that you wonder why Jaguar did it. The Vanden Plas dashes are generally more heavily figured than the Sovereign's.

The lens of the speedometer is designed to scratch easily. There must be a reason for it, although the reasoning escapes me. While the others are glass, this is plastic. There are plastic polishes available that do a perfect job of eliminating those scratches (caused by wiping the lens with a dry cloth). Some people have had replaced the plastic with glass, but this involves dismantling the gauge and making sure that you have a hole cut for the trip counter knob. This seems unnecessary if good plastic polish is available.

As I have stated, I like to use carnauba wax on the wood; it gives a superb shine, protects with natural UV inhibitors, and just may "plasticise" the surface enough to keep it from cracking. I can only say that none of my dashes have any evidence of cracking. Concours tip: a very soft, child's toothbrush is useful for clearing any minor wax residue from around the instruments, the glove box handle, etc. I do NOT use Armor-all or similar products on the dash top. (Syllogism: shiny plastic is vulgar. A Jaguar is not vulgar. Therefore the plastic in a Jaguar is not shiny).

Previous Page

<u>Contents</u>







One product that again does work well for any vinyl in the Jaguar is the Leatherique Prestine Clean, and again a soft toothbrush helps to loosen any ingrained soil.

The light switch bezel and the one for the ignition switch can be adjusted for fit. There are two screws underneath. Loosening them will allow you to reposition the bezel to mate with the lower dash padding.

The master lighting switch on S3 North American cars is vastly simplified compared to the UK version. But because these export cars were not fitted with rear fog guards and because an accidental depressing of the switch while turning would leave the driver with no headlamps, an "inhibit" clip, a "circlip" was added to prevent depression of the switch. If you have fitted front fog or driving lamps using the existing wiring harness, you must remove the bezel as noted above, and remove the "circlip". Now when you depress and turn the switch, the headlamps will extinguish, and the driving lights will illuminate. At the same time, all the other side, front and rear lamps remain illuminated. You can now easily enable the fog lamp warning light at the upper right hand of the warning lamp unit. Remove the cover for the fuse access on the underscuttle (driver's side, LHD). Remove the fuse box cover. Now you must take a short length of wire and bridge fuse holders 1 and 9 for 6-cylinder cars, 1 and 7 for the V12 cars (these both take 20A fuses). Now you will not have an excuse for driving with the wrong lights on, as though you were a BMW owner. Jaguar has already foreseen this possibility of idiocy (driving in the city with main ["high"] beams and driving lamps together), and has thus arranged the system so the headlamps extinguish when the auxiliary driving lamps come on.

Console

All the XJ cars have a central console, of generally the same shape. The S1 cars had a ribbed alumin(i)um finisher panel (except for the Daimlers, which had a black vinyl covered panel). This aluminum panel suffered from the inevitable scratches, and worse, could reflect sun light badly. But the S1 cars had lovely electric window switches, chromed, and in the usual place.

The S2 and early S3 cars used the same console, this time with a black vinyl covered metal finisher, edged with a silvered moulding. The switches were now black plastic, and especially in the S2 cars, not very long lived (too much current passing through affected the contacts). The good news is that they can be carefully dismantled, the contacts cleaned, and be good for another 10 years. These cars had the radio/climate control panel in brushed and polished aluminum, and above that, two similar panels for the fuel, heated rear screen, map and interior light switches flanking the clock, and a really useful oddments tray with deep sides. The tray is covered in a napped nylon cloth, best cleaned by vacuuming. By 1982 the size of the nylon-covered section was larger, and in 1983 the design of the upper console changed entirely. It now had a fairly useless, shallow oddments tray (everything tends to slide off as you round a corner; this is a bad place for a coffee mug), and a two-step panel, veneered on metal, below. In the upper part of the later design sits the trip computer, if fitted (it was optional in Europe on some models; if not fitted, the usual square quartz clock took its place, but looked rather lonely), the rheostat for the dash lights (moved from the underscuttle panel) and the cigar lighter. The lower step contains the usual four switches. The radio/climate control panel is now black, and the console finisher now extends right under the radio panel. It is black vinyl covered until '86 when it becomes a mirror-matched veneered panel.

Previous
Page



The S2 and 3 cars had a completely different and much improved climate control system made for Jaguar by Delaney-Gallay and known as the Delanaire Mk II. Even this went through two revisions. By 1982 the system was revised to allow for different temperature air delivered to face and floor, regulated by means of the wheel switch beneath the radio (the "air proportioning switch"). Pushed to the HOT side, the air was of the same temperature above and below. At the COLD end the face-vent temperature was several degrees cooler. The V12 cars for '87 and later (but not, it seems, the '87 XJ6 S3) now had the Mk III version of the Delanaire system, derived from the one produced for the XJ40 cars. The control panel looked the same, but the entire inner workings were revised, and now computer controlled. There was an override for the temperature control so that if the knob was pulled out, the operator could maintain the air entering the cabin at a selected temperature. This is different from the automatic (knob in) setting which permits the computer to regulate the air flaps and adjust the fan speed "steplessly" to achieve the cabin temperature selected, as on the Mk II unit. This Mk III Delanaire is superior in a number of ways, not the least of which is the ease of replacement of the heater core. With this system it is no longer necessary to dismantle the entire dashboard for access.



Late Series III Delanaire Mk III panel

The '79 and '80 S3 cars had an additional switch on the finisher for the radio aerial so that it could be adjusted at will. But these cars did not normally have a sunroof. The cubby is almost the same for all years of the XJ although the depth of the space changed. The lid is fixed by a two-screw piano hinge, and is easily adjusted for proper latching by loosening these screws and playing a bit (the screws should have a stainless washer). Once the cubby is removed (small black screws, including two on the stay support; the front female clip for the lid is sometimes a problem, but it is usually possible to simply tilt the cubby if it cannot be pried loose. The best method for removing it is to pry it up at the sides, not the front and rear

portion) it is possible to have access to the window and sunroof switches. The connectors simply pull straight off. On reassembly make sure that they are properly seated, with the contact pegs in all the holes. It is easy to fit them "off centre" so that a couple of the pegs are dangling in the air. Naturally, the window will not work that way.

If your windows move slowly or not at all, the cause is likely to be that the contacts within the switches are dirty. This is easily remedied. Remove the connector from the switch as noted above. Now remove a connector from a window switch which is known to operate properly. Put it on the suspect switch, and try it. If the window now moves well, you have located the problem in the switch. Remove the faulty switch by depressing one of the plastic clip segments and begin to ease it through the front of the panel. Once out you can gently pry the sides of the switch apart to allow the rocker to be removed (be careful! There are tiny springs in there but generally they stay in place). Now you will see two copper strips, and you will easily see the blackened contacts. All you have top do is to clean the "carbon" off the contacts (and for good measure you can reverse the copper strips) and reassemble. Good for another 15 years!

Another cause of slow-moving windows is dirty nylon "felts". The solution is simple. Lower the window. With a damp cloth, cleath the felts well. Take an aerosol silicone spray and liberally soak the felts all the way down the channel (protect the paint and the interior door panel from the silicone spray). After a few

up and down cycles you will note that the glass moves noticeably faster.

The switches have to be disconnected in order to remove the console finisher to have access to the transmission quadrant, ground wires, the fibre optic bulb, cruise control connector (down at the driver's side) etc.

Previous Page

<u>Contents</u>



Once you have removed the finisher, it becomes a routine procedure, and can be done in less than 10 minutes if necessary (don't worry. Once you correct the horrors made by the previous owner, you probably won't have to get in there). If you have a pre-'83 car, you will have to also disconnect the cigar lighter, which is mounted to the black finisher. The fibre-optic cell is covered by a rubber mask. If you slide it back you can assure yourself that all the fibre-optic lines are properly seated within the unit (there is a metal sleeve at the end of each line which snaps into the holder). Replacement of the bulb is obvious, as is that of the bulb for the transmission selector quadrant. There are ground wires connected to the base of the transmission quadrant unit. The nuts here should NOT be overtightened as they can shear off.

Going to the rear of the console: with the cubby removed, or tilted up, you can twist the retaining ring for the rear vent, and the vent will come out from the rear. The rear console piece holds the switch panel, (and on the Sovereign and VDP, the cigar lighter) and ash tray unit, and is removed by removing two stainless steel screws, one on either side of the console extension, visible by moving the front seats forward for access.

The business end of the console, however, is the front. Access to this crucial area is by removing the plastic vents in the foot well (two long screws); be careful on replacing these vents as the air direction is INTO the front of the foot well. And do NOT over tighten: remember snug is tight, tight is cracked. The "cheek" panels slide forward and out, allowing access to a frightening amount of wiring, vacuum hoses, solenoids, resistors and so on. It is a good idea to familiarize yourself with this area as there are several inline fuses here: two for the radio (power and preset, left side), one for the electric seat (pink and white wire; left side), the cigar lighter (purple to brown, right side), the AC compressor (mounted and attached to the right side of the Delanaire unit, high up), another for the AC amplifier (on the left side)....Some cars (Daimlers, and most most late V12 cars...) will have the electric seat on both sides; if so, the units are joined in one harness which still proceeds to the single fuse on the left side of the console.

Those of us who have done the "Gardiner modification" for fresh air, or the even more sophisticated compressor modification, know this area well. If you have a Delanaire Mk II unit (on the S2 and S3 to '87: it also works on the later computer-controlled Delanaire Mk III used on the '87 to '92 V12 cars) At the very least the Gardiner mod is worth doing because it will allow you to have fresh air (heated if you so desire) entering the cabin without the use of the compressor or the fans. It is most effective at highway speeds, of course, but also useful around the city. Where I live, I can use it 10 months a year, and so must be careful to turn on the climate control periodically. Failure to do so can result in damage to the compressor through lack of lubrication, and loss of refrigerant through shrunken seals.

The modification is a doddle as the Brits say, and the best part is that it is invisible and completely reversible and in no way interferes with the "normal" operation of the climate control. Here are brief instructions: remove the left hand access panel of the console. Remove the tiny screws holding the air vent duct (careful! They easily fall down between the carpet and the transmission tunnel). Now behind and forward of this duct you will see a vacuum valve with a blue vacuum line attached. This is the fresh air flap solenoid, black and silver, with the word AISIN on it. (Cars before '83 have a slightly different valve and may require substitution with the AISIN valve). Remove the black ground wire from the valve (these are spade connectors and you will need three female and three male connectors in total). Now connect this to male connector on a wire long enough to reach through the console to the master window switch.

Previous
Page

<u>Contents</u>

Connect a similar wire, using a female connector, to the valve from which you removed the ground. Having fished the wires through the console (the finisher should have been removed), remove the master window switch and the female connectors to it. Now using two female connectors, attach the two wires to the master switch. Using a very short piece of wire with two male connectors bridge the power window wires you removed from this switch. All of this is obvious in practice. Now your windows will work whenever the ignition is on, and you will now be able to open or close the fresh air flap at will. The Mk III computerised system is modified the same way except that the wire to be disconnected on the vacuum valve (which is of a different design, but still has the blue vacuum hose) is green, not black. Further information is in the Jag-lovers Archives.

For the mid-'81 model year Jaguar deleted the foot well vents ("PULL-AIR") and blanked off the air ducts coming from the headlamp surround on the climate-controlled cars. At the same time they introduced the "air proportioning" control beneath the radio as described above. This control is lighted on export cars, but most UK cars, for some reason (early ones at least) had simple unlit arrow markers. The later Delanaire Mk III has a more sophisticated control, which looks identical, but is electrically actuated and operates without a "ratchet" feel.

The console armrest is similar on all models, but on the Vanden Plas and Double Six cars it is in edgestitched leather. Like the door armrests which are in the same style, it looks luxurious, but in use can be a touch rough at the edges for sensitive hands, and is subject to wear of the stitching. The console panels pick up a considerable amount of dirt, especially the "cheek" panels; it is best not to use harsh cleaners on any of the interior soft work, as some of it is leather, and in any case these chemicals can even be too harsh for the vinyl. Use such products sparingly or diluted. Leather cleaners work well and safely, especially in conjunction with a soft (tooth)brush. If your VDP or Double Six armrest shows some wear at the front edge, it can be successfully recoloured using the same method as on the seats (see below).

Seats

The XJ saloons were trimmed in different ways. A simplified overview: except for owner-specified, or small-engined cars, which could be had with cloth interiors (very nice in the late S3 XJ6!), the saloon was trimmed in leather. The S1 and S2 cars had narrow pleats to the seat facings, and perforated (actually, diamond-embossed) leather. The V12 S1 and 2 cars had wide pleats and smooth leather, and this was also the Daimler standard. The S3 cars all had wide pleats to the seat facings, using the embossed leather up to 1982, and "smooth" leather afterwards in the Jaguar, and smooth leather always in the Daimler. The embossing allowed for minor imperfections in the leather, which the smooth finish did not, meaning that the smooth leather had to be of an unmarked quality. Generally speaking, the embossed design does not age very well because normal wear tends to even out the embossing, and in addition these cavities are perfect dirt traps.



The Daimler Double Six and Vanden Plas seats are of a different design than those in the XJ6 and Sovereign, and fully leather-trimmed rather than having the back and side panels vinyl (seating surfaces in every leather-trimmed Jaguar are all leather): the rear seat has two "individual" seats with a central bolster and large armrest with a cubby under the leather covered lid. These cars are often chauffeur driven, and the rear seats are higher than in other Jaguars, and much firmer, and to many posteriors, including mine, can be less comfortable than the seat design used in the XJ6, Sovereign, and "normal" Daimler.

1982 XJ6 seats in Biscuit

Previous Page

<u>Contents</u>



Just a note of clarification: The US and Canadian VDP models are trimmed essentially as Daimler Double Sixes, but with the appropriate Jaguar badging. There are many qualifications to this, which fall outside the scope of these articles. One interesting point: the '88 to '91 Canadian Vanden Plas cars, all 12 cylinders, are in fact Jaguar Sovereigns with certain upgrades (inlaid Daimler-style wood, for example, the Daimler stitched armrests, with seats that appear to be like the Sovereign seats, but in fact are almost 2 inches shorter in the seat cushion, thus giving the appearance of a roomier cabin), while the '87 and earlier V12 Vanden Plas cars were as stated above, Daimler Double Sixes with Jaguar badging. The '92 Canadian specification V12 VDP is again a re-badged Daimler Double Six, with gorgeous Connolly Autolux leather seats piped in a contrasting colour. These cars are quite special as they are the last 100 and are numbered as such with a brass dash plaque. My '92 is in fact listed in the factory build-record as a Daimler Double Six, confirmed by its VIN.



in Saville Grey

V12 Vanden Plas front seats (Canadian spec.) V12 Vanden Plas rear seats (Canadian spec.) in Saville Grey

Removal of the seats: the front seat bottoms are held in place by a single screw at the front which is attached to a bracket fitting under the seat frame. Once this is removed, the bottom simply lifts out. In the case of the electric seat (which for US, and some Canadian models is driver's side only, but in late Canadian, many Daimlers, some Australian and New Zealand cars, may be both sides), there are two connectors to be unclipped. Jaguars can be serviced by anyone with even the slightest showing of an IQ, or so my mechanic told me early on, in a pointed reference to my abilities. In other words, the connectors

cannot possibly be confused. This is true almost without exception for the entire car. When you have removed this part of the seat you will be able see how well finished the entire car is, not just the parts you normally see. The seat frame is held to the rails by torx-head machine screws and removal requires a right-angle torx tool, and the ability not to lose the nut that sits under the bracket!

The rear seat is removed by taking out the two screws central to the bottom of each seating position, and pulling up and out. Now at the bottom of the seat squab (the backrest) you will see two metal loops held against the body by bolts. Remove the bolts; lift the seat squab UP to disengage the clips, and OUT. You will have to move the shoulder belts aside (do NOT remove them). You may find a treasure in coins under the seat. In the best circumstances the seat pan will be clean and above all, dry. When you have the seat out you will be able to remove the duct-tape at the wing access holes, and spray rustproofing into the fender to augment the wax spray already there. If your seat belts are twisted, this is the time to remove the bolt and straighten them, but do NOT, repeat do NOT let the belt retract completely. The units on the parcel shelf are attitude sensitive. If you remove them for any reason, you must wrap the seat belt around the unit, otherwise it will be virtually impossible to extract the belt again.



1988 V12 Vanden Plas seat (Canadian spec.) in Doeskin

Leather

The very best thing you can do for your interior is to keep the car out of the sun. The sun accelerates the aging process in our skin and in steer skin, which is really what is on our seats. Cleanliness and oils are necessary to a healthy skin, and to healthy leather. Assuming your leather is in good shape, you may clean it with a BARELY damp, soft cloth. Don't forget the seams: a vacuum and soft toothbrush are good for this. Then apply a quality conditioner (I do it monthly): Gliptone, Lexol, Leatherique, and there are others. Do NOT use the kind that Japanese car owners use. Do not use the kind BMW owners use.

They like shiny surfaces. That means that you should stay away from certain brands commercially available; (I leave the brand names to your imagination, but if

you find it at Canadian Tire or Pep Boys, don't buy it); Hide Food, while labeled by Connolly, is hideously difficult to use, and not nearly as effective as the ones mentioned above.

Previous Page

Contents







I have used Lexol and liked it, but my favourites are Leatherique Rejuvenator and the Color Plus Soffener. Both do a superb job of keeping leather soft and supple. Others have had success with Gliptone. In any case, I have found it most effective to put the conditioner in a small bowl, and to use my hand and fingers to apply and to massage-in the conditioner (this is SKIN, remember). That way you do not lose any of the very expensive liquid, and it is absorbed better. Leave the conditioner in place as long as possible: several hours, or better, overnight...heat sometimes helps, but frankly heat is damaging to the wood, so I chose NOT to leave the car in the sun to condition the leather.



Rear seat of 1992 V12 Vanden Plas: Doeskin with Barley piping Once the conditioner has been absorbed, a buffing with a smooth, soft cloth will bring up the natural lustre. If your leather is not absolutely clean (and almost none of us can claim such cleaznliness), the capillary action of these superior conditioners will bring the dirt to the surface. You may find that the first few applications leave a very tacky surface and that your buffing cloth comes away dirty. No worries, mate. That stops once the leather has cleansed itself. This is precisely what happened with one of my '87 V12 saloons; the Saville Grey leather looked quite clean, but the first applications of Leatherique made the cloth come away very GREY, and the surface felt sticky. It was not colourant, but dirt. Further treatments left

the leather deliciously soft and clean, with no more residue. As stated above, a soft toothbrush is essential in the cleaning process. These same companies (Lexol, Leatherique, Gliptone, Color Plus) make a leather cleaner that should be used before the first application of the conditioner. You will be appalled by the dirt hiding in the leather, and in the seams. Get rid of it. As on your skin, it clogs the pores, inhibiting the proper absorption of conditioner.

Pay particular attention to conditioning the top of the rear seat squab. This is the section that receives the direct sun, and is the first area to deteriorate. The leather first dries because the oils are leached out; then it shrinks, then it pulls the seams, then the threads break. (Jaguar threads are not nylon, but cotton, by the early '80's coloured to blend with the leather). Some of the conditioners (particularly the Leatherique Rejuvenator, and the Soffener) can soften hardened and dry leather with repeated applications. Don't give up if the leather is not torn or otherwise damaged. It is useless to think about re-stitching until the leather has been softened and expanded, since it was the drying and shrinking which caused the seam to split in the first place.

Connolly leather is just about the finest. There are different grades of Connolly, of course, and Rolls Royce gets first pick, along with Aston Martin; lots of first quality stuff left for Jaguar too. In the top-line Jaguars a thicker, often more heavily grained leather, called AUTOLUX, is used. Like most others, Jaguar leather is not vat-dyed; that is, the leather colour is on the surface only, not through the thickness of the leather, and this is a pretty standard procedure for automobile leather. Until fairly recently the colour coating was lacquer-based. This coating was subject to fading, and if not regularly conditioned, to drying and cracking. The newer Jaguars have a more environmentally-friendly, and more durable water-based colourant. The good news is that YOU, yes, YOU, can apply the same type of coating to your faded leather. You can, if you are a masochist, also opt for the old-style lacquer, which must be sprayed on, with appropriate health precautions taken. Connolly can supply such a kit. There are several companies which make the water-based colourants for Jaguars. I have used with enormous success, SURFLEX, made by Color Plus in the US. Leatherique makes a similar product, and there are others.

These companies require a one inch square sample of the leather or vinyl from a hidden portion of your seats (the bottom of the rear seat always has sufficient excess for this). They will use a spectrograph to exactly match the colour of the sample you send. I can verify that Color Plus has twice provided me with an EXACT match of the surface colour. Once applied it gives a surface indistinguishable from new. NOTE: your leather has faded; that is why you are re-colouring.

Previous Page

<u>Contents</u>



So you want to send, in fact, a sample of the vinyl, which has NOT faded. That way your interior will end up all of one colour. Even when your Jaguar left Coventry there was a slight difference in the colour of the vinyl and that of the leather. Inevitable. But once you colour your leather to the tone of the vinyl, it will be a better-than-new match. Specify "low gloss" or "matte" finish. These products are non-toxic, clean up with water, dry to the touch in 20 minutes, accept conditioners when cured, bond to the leather, and do not crack, chip, or wear in any way other than the original surface did. The surface produced is, in fact, more durable.

Areas that wear again may be re-coloured as necessary. The "age lines" of your leather will remain, but those creases are just the lovely patina of use, and in fact add to the value of your interior. If you do recolour, you can use either a foam brush, or a fine bristle (neither leaves any marks). There is no need to spray. Use THIN (how can I say this strongly enough?) THIIIIN coats, a maximum of three. Use a toothbrush to clear excess colourant from the seams and piping areas so there is no build-up. The result is an entirely renewed interior.

If your leather is torn, or has been damaged beyond redemption, you may want to consider new leather. There are several suppliers: Paul's Jaguar in Florida supplies authentic Jaguar leather (I have that in my '82 XJ6; gorgeous); after-market leather covers are supplied by BAS, Original Specification Jaguar Interiors, British Auto, and so on. The cost for an XJ interior (seats only) can run to about \$3000 US. New seat foams should be bought for the front at the same time (available from all these suppliers). This makes \$150 worth of colourant pretty attractive, doesn't it?

If your driver's seat is sunken, you can either have an auto upholsterer rebuild the bottom, or you may do it yourself if the seat is not far gone. You can install a new foam (which must be the right one for your seat), but you may need a new diaphragm as well. The '84 and later cars use a rubber diaphragm while the earlier cars have a fabric-covered chord arrangement. A less expensive option if your seat is not too far gone is to augment the existing foam. If you go to a foam supply shop you can buy upholstery chip foam, the best grade, which is about an inch thick. If you remove the seat bottom and place it upside-down on a table, you can simply fit a properly cut piece of the foam between the diaphragm and the existing foam. There is no disturbance of the leather cover or of the existing foam, but you will have to release several of the diaphragm clips for access. Once done, your Jaguar seat will be firm and somewhat higher than before. I have done precisely this modification with completely satisfactory results on my '88 V12. Another option, equally satisfactory is to use a camping pad: the very dense 3/8 inch pad. Two layers of this between the rubber diaphragm and the original foam will provide a firm base and will raise the seating surface a surprising amount. I have done this in two other Jaguars.

So, to sum up: keep the leather out of the sun, clean, and regularly conditioned. Treat it as well or better than you treat your own skin, and it will last for decades. These Jaguars were not built for a 5 year-use cycle; they were constructed to be in service for at least 25 to 30 years with proper use and maintenance. Many of us can attest to their durability, given this care. I have a daily use '74 MGB, owned since new; now if an MG can last that long (and a British Leyland MG at that!), then we should have no worries about a Jaguar doing the same or better.

Some contact numbers: Paul's Jaguar: 954 846 7976 Color Plus: 570 686 3158 OSJI: 800 338 8034
BAS: 800 661 5377 Brit. Auto 800 452 4787 Leatherique: 904 276 8441

> Previous Page

<u>Contents</u>

Door panels

Again, I am mainly concerned here with the S3 cars, but the S1 and S2 cars are similar in broad outline. The door panels on the XJ are of a two piece design until '81. Up to this point the cars had a padded top piece separate from the main panel (the S1 cars also having a very nice wood trim cap). The Vanden Plas, Sovereign and Double Six cars had a black top piece, while the others had the top in the same colour as the rest of the panel, that is until the vinyl faded; most 1979 and '80 S3 cars have badly discoloured pieces on top because Jaguar used a different vinyl there. For the '82 model year the panel was identical in appearance but now it was one piece, and the same vinyl was used throughout. Result: no more fading.

Although the black-capped panels use two separate vinyl-covered pieces, the panel comes away as a unit. Most of the cars have a separate trim band insert in the door handle cavity, but for some reason the '82 cars, and possibly the '81, did not (this seems to coincide with the strange omission of the front seat-back map pocket in '82). The XJ6 door panel has a one piece front armrest/pull and map pocket, while the Sovereign/VDP/Double Six cars have a separate armrest/pull, set at an angle.

Removal of the door panels is advisable every 10 years or so to lubricate the lock mechanism and rods. This means that in the life of the well-kept XJ saloon, the door panels will come off 4 or 5 times (!). It is best to know how to do it. (I am being only slightly facetious: as stated above, these cars are designed for a service life far beyond that of the average car; every piece can be dismantled for repair or lubrication and put back together. Try that on your Lexus, but don't spend too much time at it). The removal of the panels is pretty much intuitive once you know how they are fastened. You must remove the armrest/pocket, and then the panel. In the case of the driver's door you also have to deal with the mirror controls.



Late Series III XJ6 rear door panel in Biscuit

Series III VDP door panel in Doeskin

On the XJ6 you begin by careful sliding back the chrome finisher at the front of the door pull. Use a flat blade screwdriver to lever it back along the pull. Now the main fastening screw is revealed. Remove the screws along the bottom of the map pocket, and the one visible at the front of the armrest. Thump UP on the bottom of the rear part of the map pocket and then pull back. This will release the two peg-in-slot fastenings. Be careful not to tear the vinyl cover with the pegs. For the driver's door, you must remove the mirror escutcheon, held by two screws. The whole unit will pull away and you will see the mirror connectors secured by plastic ties.



If you are simply lubricating the locks, you do not need to disconnect the mirror control. You can simply let the panel rest supported. If you DO disconnect the control, have some new, short plastic ties ready for reassembly: they serve to keep the connector from accidental separation, and subsequent loss of the inner wire into the door. The speaker stays affixed to the front door. Gently pry (prise) the edge clips away: these are plastic tabs fitted into slots in the panel which in turn clip into the door itself. These clips are readily available at trim shops. Now lift out at the bottom and UP to free the tabs at the top edge. You are now free to use a spray lubricant on the lock mechanism, with some grease for the rod

Latest style mirror control: 1992 V12 Vanden Plas

slides. Lubricating will bring "dead" electric lock mechanisms to life in 90% or more of cases.

Previous Page

<u>Contents</u>







The rear XJ6 door panels are simpler, and obvious; here the speaker comes away with the panel (connectors are one way fit; no confusion) You must remove the ashtray to reveal a hidden screw. The lift the panel straight up to clear the tabs, and away. Be careful to disconnect the speaker leads (very small connectors, and again, there is no confusion).

The front Sovereign/VDP/Double Six panel removal is similar to the XJ6 panel procedure with the following differences: Remove the retaining screw and slide the light lens out of the armrest. Remove the inner screw on the light assembly. Remove the screw on the underside at the front of the armrest. (If your car is an '87 to '92 car, it will have a plastic slot-head retainer here. To remove it, turn the slot so that it is parallel to the door. Gently prise the clip down and out). Slide the top of the arm rest BACK (if your panel has never been removed, you will have to coax the top of the armrest back. Be patient.). There is one screw at the bottom centre of the map pocket. The map pocket stays on the door panel; the driver's door has the mirror control in the top of the map pocket unit; same procedure as above. Again, for both the rear and front doors, be aware of the tab which supports the speaker unit, at midline, and for the front the similar tab just above the speaker.



Series III VDP door panel in Doeskin

In all cases, take note of the name of the person who finished the panels. His name or initials are written on the back of the armrest or the underside of the armrest padding. Try that on your Lexus! When refitting, it helps to have the window DOWN; you may want to bend the panel tabs OUT a bit to ease fitting at the top. While the panel is off, take some silicone lubricant spray, and lubricate the felt window channel trim. This will speed passage of the glass remarkably. Also use this opportunity to spray some RUSTCHECK, WAXOYL or similar into the bottom 1/4 of the door panel. You will note on the later cars that the factory wax rust proofing is still visible, but in the corners, some of the thin spray will not hurt at all.

Make sure that the drain holes at the bottom of the doors are clear. Finally, make sure the plastic splash shield is intact and attached to the door. This prevents moisture from deforming the inner trim panel. If your door has wood trim, don't forget to give it a coat of wax after refitting the panel. As noted earlier, the same carnauba wax can be used on the wood and the outside paint!

Headliner

The headliner in the S1 and 2 cars is especially elegant with the padded cant rail at the edge. On the S3 cars these rails were replaced with a vinyl-covered padded rail. As with many cars, heat and age can take a toll on the Jaguar headliner. Once the material has separated from its foam backing and begins to sag, the only cure is to replace it. This can be done professionally for about \$350, or if you are a brave soul, you can do it yourself. I say brave, not because replacing the fabric is difficult. In fact it is quite easy: some spray adhesive (heat resistant) and careful work is really all that is necessary. But first you have to remove from the car the "biscuit" which the material is mounted on. This biscuit is fairly fragile if bent sharply, and some bending is necessary to manoeuvre the thing out the rear door. Some claim that it is necessary to remove the rear screen, but this is not true. This is the sort of job that I would leave to those who do it regularly; a good auto-upholstery shop will be able to help and will have a selection of appropriate materials.

If your headliner is soiled, a good vacuuming is helpful, and stains can be removed by sparing use of paint-thinner or spot remover, but take care: excess amounts will dissolve the glue between the material and the biscuit. Even a barely damp cloth rubbed over the surface of the headliner will remove a surprising amount of dirt.

<u>Previous</u> Contents Page

<u>S</u>

INTERIOR UPGRADES

These upgrades refer to the Series 3 XJ6 cars, although some may also be applied to the S2. They are "authentic" in that they are upgrades Jaguar used on its top-line cars, and are perfectly in keeping with your XJ6. I have done all of these on my '82 XJ6, in effect transforming it into a late Sovereign-specification car, and it is now badged as such (though to be accurate the Sovereign appeared only in '83 for the '84 model year). Those who have '85 and earlier cars may want to upgrade the trim: you can buy entirely new door panels from the '86 and '87 cars for the XJ6; these have the walnut fillet at the top. You may also want to source some of the later style chrome-ringed speaker grilles as used on the '86 to '92 cars (very nice indeed). They fit in place of the existing black ringed grilles, and the speakers must be removed to fit them, so a good time to do this is when you have the panels off for lubrication of the locks.

Another nice upgrade is the substitution of the late chrome seat bars for the black ones. The chrome was also used in the later cars to '92. To fit them you need only remove the bottom of the driver and passenger seats, and release the clip at each end of the bar. Refitting is a reversal of the removal! If you are feeling ambitious and affluent, you can also fit the passenger side electric mechanism (US owners note: this was fitted to the '88 to '92 S3 Canadian cars and was an option in the UK earlier; fitted as standard to some years of the Daimler Double Six). You will need to remove the passenger seat entirely (using the right angle torx tool) and fit the entire mechanism, including the wiring harness which passes through the console to the driver's seat; here it connects to the driver's seat fuse. This is the final and rare touch of luxury.



Passenger electric seat in Biscuit

On the S3 XJ6, as opposed to the better-trimmed Sovereign, VDP and Double Six cars, the front footwell "kick panels" are covered in vinyl, while on the higher-trimmed cars these panels are carpeted. The carpeting not only looks more luxurious, but it also helps the sound isolation. You can get matching carpet pieces for your XJ6 from a wrecker (one floor mat should do both sides), or used pieces from various sources. All you have to do is remove the bottom bracket for the "kick panel" (2 screws) and the third screw at the forward upper edge of the panel. Remove the furflex from the bottom portion of the door opening and remove the panel. You will now be able to see those blanked-off air outlets, and other

interesting bits and pieces. To apply the carpet you must scrape off the felt backing which provides significant thickness, to allow the carpet to conform properly. The grain of the carpet should run vertically, and make sure that you have it running the same way for both driver and passenger sides. Just cut the carpet using the panel as a template, but allow a bit more at the top. Using trim adhesive spray, apply the carpet. Refitting is a reversal of the removal procedure! This is a real improvement.

Do you want reading lights as in the Sovereign and VDP/Double Six? Fairly easily done. Again, the lights are obtainable from "the usual suppliers", either new or used. They are elegantly engineered and have simply a one wire connection (being grounded through the mounting screw); they shut off automatically when folded to the "park" position. Make sure that you have the lens (available separately),

spring and bulb, and the proper plastic base and cover. The bulb is simply held in place by the spring tension against the screw-in lens. Fitting: remove the chrome cover from the grab handle (it slides along the handle); remove the fitting screw, which also holds the C panel cover. GENTLY pry the clips at the edges of the C panel cover (this job is easiest if the rear seat is removed). Remove the panel. Your car may already have the later-style cover which has the holes indicated for the lamp.

<u>Previous</u> <u>Page</u>

Contents



If so, it is merely a matter of perforating the cover to allow the lamp wire through. This cover will also have a metal triangular piece which makes ground contact as the panel is fitted. For extra security, or if you have the earlier C panel cover, you will CAREFULLY drill a small hole into the inner metal C pillar panel to accept a mounting/grounding screw. Use a SHORT drill bit to do this; you do not want to pierce the outer body panel! (this is not likely, but be careful).



Rear seat reading lamp

The lamp is fitted so that when folded in the OFF position the lens faces forward and the lamp body lies along the vinyl bolster at the roof edge. Now fit the lamp to the C panel cover, using the plastic base and using 2 short bolts with nylock nuts (this is how the factory unit is done). It helps also to use washers for support. Run a single automotive wire down the C panel to exit at the seat area. The lamp is originally finished with a bullet connector but you may easily substitute an insulated spade connector. Now: you have a choice. The factory unit is wired to a constantly live source so that the lamp may be used at any time. This gives your chauffeur a place to read in comfort while you are at the "drinks" party ("cocktail party" for North Americans). However, this also allows the risk of

leaving the lamp ON even when the car is garaged. Result? a dead battery. If indeed you have a chauffeur, then that is his problem. If, however, you do not, and the lamp was left on by your six-year-old daughter, it becomes YOUR problem next morning. Although I have neither chauffeur nor six-year old daughter, I opted to have the lamp wired in to the parking lamp circuit; that way the lamp will only work when the car lights are in operation. I usually do not read in the back seat while my wife is at a cocktail party, so I have not encountered any inconveniences with this. I ran the wires from both left and right lamps together and into the boot (easily done through the rear seat panel). I hooked into a new inline fuse unit and tapped into the parking light circuit. This way, if there is any fault in the reading lamp circuit, the fuse will blow, but the running lights will remain functional. This is an unlikely scenario, but it is good Jaguar practice to protect every circuit with hidden, and hard-to-find in-line fuses.

In the boot, remove the side panel (either left or right; I opted for the left side. This will reveal the wiring harness to the rear lamp cluster. Using a plastic/metal tap (the kind which simply bridges the new wire and the existing, without cutting deeper than the wire insulation), make a connection to the parking light circuit (not the brake light!). Now, back in the cabin of the car, complete the fitting of the lamp. Take the C panel cover, and insert through the remaining hole in the base the longer screw that will tap into the inner metal C panel as a ground. (If you have the late C panel with the triangular metal piece, you probably don't need to do this, as the purpose of that piece is to make a ground contact. But an extra ground won't hurt). Snap the plastic cover over the lamp base, and voila! (these base/cover units were black in the earlier cars and sandstone/doeskin colour in later ones to match the C panel cover colour. If you can have the black C panel covers, then you can use vinyl spray paint to change the colour appropriately). You are now on your way to making your XJ6 into a pseudo-Sovereign.

Two more things are necessary to make a late Sovereign lookalike out of your XJ6 : the extended rear console section with lighter and ashtray, and rear seat headrests. Both of these may be sourced in the same place as the rear reading lamps). This Sovereign/VDP rear console piece fits perfectly using the same screw holes, and window wiring connections. If you want the lighter to work you simply run the

wire up to the front lighter wire (on right side of the console). If the colour is not correct, and it probably will not be since the XJ6 colours (commonly biscuit, Isis blue, mulberry, and even black) are not as frequent in the "upmarket" cars, you can just use a colourant such as Surflex by Color Plus, or the Leatherique equivalent. As an authenticity note: the rear headrests and reading lamps could be specified as XJ6 options in certain markets, but not in North America, where the "no options" Jaguar reigned.

Previous Page

•

<u>Contents</u>





XJ6 'Sovereign' rear headrest and lamp

The S3 cars from mid-1981 (VIN 329308) all have the installation brackets already mounted for the rear headrests. All you need to do is source the headrests themselves (either new , or used from a Sovereign or VDP), remove the rear seat, make two small X slits in the vinyl portion atop the seat squab to accommodate the two mounting pegs on each unit (measure first!) , tighten the nuts, and that is it! They look magnificent. There were two styles of headrests and those used on the last cars ('90 to '92) are narrower and slightly higher than the earlier style, but both have the identical twopeg fitting.

If you own a pre-'86 car you may want to consider installing a Jaguar-original third brake lamp at the rear screen. This is the same unit used in the XJ40 cars to '90 or perhaps even later, so any Jaguar from '86 to '90 can serve as a donor. The S3 lamp covers are all black, but the XJ40 covers can be of a Doeskin tone. No matter. They are originally attached to the glass by means of a 2 small brackets which are glued to the glass; the lamp unit has two spring loaded clips that slide over these brackets and the unit is thus held firmly against the glass. There is no pedestal. The wiring harness passes under the rear shelf panel and may by passed into the boot through one of the access holes in the rear seat panel, where it is attached to the brake light wiring as it goes into the "bulb out" sensor. Harder to explain than to do, really. A professional job means getting some "limousine tint" film, tracing the mask from an '86 or '87 Jaguar, applying this to the glass, mounting the brackets with rear-view mirror glue. I went to the extreme: I fitted a rear screen from a 1990 S3 car to my '82, after a concours judge noticed an air bubble in the mask I had applied. Most normal people would think this an extravagance. This lamp installation is not only a safety upgrade, but it takes years off the appearance of your car.

The '69 to '85 cars, in all three series, used the same sill (or tread) plates, of an anodised aluminum design with the Jaguar or Daimler name embossed. Once scratched, these are almost irretrievable, although one list member reported using aluminum paint and a clearcoat on them. A certain amount of improvement can be gain just by using a good metal polish and lots of elbow grease. The '86 to '92 S3 cars used a more luxurious-looking polished stainless-steel plate with a small central name plate. These newer plates can be fitted without any modification to any long wheelbase XJ (all S3 XJ cars are long wheelbase, and all S2 after '74 are as well). The great advantage here is that scratches can be polished out. I have retro-fitted them to my '82 (sourced from a wrecker).



Late Series III sill plates

All the XJ cars except the very late S3 V12s have steering wheels which are, to most hands, too thin, the Daimler wheel being even thinner than the Jaguar unit. While the wheel on the S1 has a pleasantly "period" feel to it, the same cannot be said of the S3 wheel found in all XJ6 cars. But there is a remedy, and an "authentic" one at that.. The wheel which Jaguar fitted to the later V12 cars is the very same one fitted to the later V12 cars is the very same one fitted to the '89 preairbag XJS. It is much thicker and of a slightly smaller diameter with a more modern look to it, and in use seems to transform the handling. I have this on all my cars, and love it. The wheel is part # CBC 2731 (with pad # CBC 6345). It is a direct replacement for the original with no modification.

Steering wheels can be centred (assuming the steering rack is properly centred) by simply removing the pad, the horn rod nut, the fixing nut, pulling it off and resetting it on the splined hub. Before you do this you must eliminate any defects in the steering geometry, assure that the air pressure is equal in both tires, and that your car is not pulling because of a belt shift (very common on the original Pirelli P5 tires).

Previous Page

Contents







1987 V12 Vanden Plas

I have made two further modifications to my '82 "Sovereign", neither of which are strictly authentic, but both of which look perfectly correct. First I have added another boot lamp. It is fitted to the rear seat cover panel and is mounted fairly low in the exact centre of the boot width so as to clear the sunroof motor. This lamp is properly "Jaguar" in that it is the interior lamp of an XJS of the period. It looks "correct" and greatly helps the illumination of the boot. I simply wired it to the switch at the right-hand hinge of the boot lid for the ground, and to a purple wire (always live) running in the same area. But it is important to select the correct one of the two black wires at the switch; one actually cuts the power as the switch is depressed, and the other will not. If you connect to

this one, your lamp will stay on all the time. It is not easy to tell which is which; I had to redo mine when I checked to make sure the lamp was extinguishing when the lid closed. It wasn't! That would have been a recipe for a dead battery. An alternative is to obtain a second lid-mounted lamp and fit it to the opposite side of the lid (the cut-out is already there), so that there is now effectively double the illumination. This does not solve the problem of the dark recess of the boot.

Finally, I fitted my '82 car with an addition walnut trim pack as previously mentioned: I replaced the now dated-looking aluminum finish radio/ac panel and the two switch panels above as well as the rear console vent panel. The result is that the car looks at once much more modern, and more luxurious. As I value originality, how do I justify this? Well, Jaguar in the '80s went through a series of modifications to the interior in which the amount of wood was increased, particularly in the console area. Had they kept the "old" console design, I am certain that they would have replaced the aluminum trim with wood. This is effectively what they did with the revised console of 1983 where every trace of the brushed aluminum was removed.

A tip regarding floor mats: the very best floor mats are in the form of another set of (used) mats from a wrecked Jaguar. These carpets are extremely hardy. If you fit another set on top, your car retains the correct look, and your original carpets are fully protected for the concours d'élégance. The Vanden Plas cars came with a set of overrugs for the passenger positions ("fleece" some years, woven nylon in other years), and they may be available from a wrecker. There was never one of these for the driver's position.

Previous Page

<u>Contents</u>



A FEW TECHNICAL NOTES

Electrical issues:

The S1 car was very well built, and fairly simple electrically. The British Leyland-era S2 cars were less well built, but those which survive have proven themselves very hardy, and are much loved. The S3 cars, especially after the 1980 installation of John Egan at the helm were generally much improved. So much so that it has proven true that in a S3 car ANY electrical fault should be sought first at the FUSE or the connector, NOT the component itself (this is actually good practice for any of the XJ cars). The electrical components of the S3 cars are very sturdy. Time after time we have proven that "dead" central locking systems can be brought back to life by simple lubrication of the mechanism; "dead" or terminally slow windows are most often not the fault of the motors, but simply of a dirty switch (and in the S2 and 3 cars these are easily cleaned, ready for another 10 years of use); other seemingly catastrophic faults have been proven to be the result of a failed fuse, and other times, of corrosion or dirt at the connector.



Relay group on firewall. Starter Relay is the right-most of the group.

Even the "no start" symptom, very often traced to the starter relay on the firewall (the oblong silver relay with multiple connectors), can be solved in the first instance by the "Lucas technique": a great WHACK! on the relay, and more permanently by simply dismantling the relay and cleaning.

Fuses: do not be fooled by apparently intact fuses. These glass fuses can have breaks under the caps where they are invisible, and worse, sometimes intermittent. ALWAYS replace the fuse, even when it looks good. This was proven to my satisfaction years ago when, as a new XJ owner faced with a completely shut-down climate control

(or so it seemed), I was advised by my mechanic in a phone consultation, to replace the fuse, which, incidentally, looked "good". Done; it has worked perfectly ever since. Second personal instance: no horns: phone consultation: "replace the in-line fuse above the battery"; done. The horns have worked ever since. In other words, these cars are sturdy; only a certain number of things go wrong, and they go wrong in predictable ways. What I have learned is that there are few real emergencies. Your car will tell you what is wrong if you give it a chance. Don't panic; think about the symptoms, get out your electrical chart (you DO have one, right? If not: Jaguar publication S57, available from Jag Services in Harvey, Illinois, USA at 708-331-9151), and work logically through the steps.

One thing that should be done prophylactically on the 6 cylinder (XK engine): replace the coil, especially if you find traces of oil at the cap or under the rubber connector sleeve. Replace it with a proper Jaguar coil (DAC3001 for the S3). This seems to be less of a problem on the V12 cars, which for the most part have two coils. Faulty coils have been known to give shut-downs, erratic running, and so on. It is also a good idea to clean up your main ground and power connections, especially the two main connections on the firewall. It goes without saying that the battery should be disconnected for ANY electrical work. (Owners of 1990 and later XJS V12 cars with Marelli ignition systems should ensure that there plugs are properly gapped at 0.025 inches. Letting service intervals go too long with this engine [that is, those with

the Marelli ignition] can have disastrous results which you do not ever want to experience). Series 3 V12 owners can relax since the Marelli ignition was never fitted to the saloon. Even my very late '92 car has the Lucas ignition. Good!





There are really only two types of S3 coils for the XK engine; all the S3 cars, save the earliest, which had a silver Lucas coil, had the Ducellier (black) coil, including my '82 and my '84. Neither of these cars had the attached ballast resistor, which seems to have been fitted intermittently through production, but more regularly after '85. All the systems were ballasted, however. The correct coil (DAC 3001) IS a Ducellier coil. My replacements were provided by my Jaguar dealer, in the green Jaguar box, the glossy black coil having a really neat matte green and silver Jaguar label pasted over a Unipart label (!). The box said "Made in France to Jaguar specification". The replacement coils even had the same yellow paint dot on the bottom end that the original coils had. Being OEM, they work perfectly, and I don't have to worry about damage to the amplifier or anything else. Of course, they cost at least twice the price of a generic coil. I know that others have used different replacements, sometimes with bad results, sometimes with no apparent problems.

The V12 cars used a double coil arrangement, the main coil within the V, the second, identical one being fitted to the top of the radiator panel. The very late Series III V12 cars used a single solid-core coil which is more compact. This new coil can be retrofitted to the earlier cars. If this is done, some mechanics will remove the secondary coil, although my own Jaguar guru insisted on reconnecting the secondary coil on my 87 V12 despite having the new-style main coil fitted. In any case, this car runs marvellously. You cannot argue with success.



XJ6 Coil

One bit of general electrical housekeeping is the cleaning and tightening of ground connections wherever and whenever you find them, but especially those at the firewall end of the coolant rail on the XK engine, the main battery ground connection, the connections on either end of the firewall, beside the battery and the brake booster, the connection from the "frame rail" to the transmission... Doing this as you work in these areas can save you from an unfortunate incident. It is easier to clean these in your garage than at the side of the road at 11:40 at night.

Spark plugs: the plug that works best in the XJ6 engine is the original Champion N12Y (which now has a new number: 404). Do not waste your money or time on Bosch platinum plugs. The experience of most people, including me, is that the cars do not run as well with these plugs. Checking the plugs in the XK engine is an owner's delight: easily accessible. The correct gap is 0.035. It is good practice to clean well the plugs sits in so that debris does not fall into the cylinder when you remove the plug. I do this by removing the plug lead, and fitting the hose of my shop vacuum over the plug before loosening it. This clears out any dirt. The plugs should only be tightened to be secure and snug because it is possible to strip the threads in the aluminum head if you are too aggressive.

Check the plugs on the V12? Not my job! This is something I leave to the experts as the front plugs are difficult to access, although others feel quite comfortable doing it. But any time the fuel rail is removed, they should be replaced as a matter of economy. The correct plugs for the V12 are NGK brand, BR7EFS for cars to '90 and then BR7EF for the '90 to '92 cars; essentially the same plug but the BR7EF has a V-groove electrode, said to provide some benefits. I imagine the plugs are interchangeable without any

difficulties. The most important thing a V12 owner can do is make sure that his distributor has been serviced, that the vacuum advance is functioning properly and that the weights are free. If this has not been done during your ownership, it needs doing! A malfunction here will affect performance and fuel economy.



V12 Engine, Canadian Specification

Certain members of the list have complained about faulty connections at the fuse box on the left hand wing of the S3 car. This box holds the fuses for the headlamps (wired individually) and also for the auxiliary engine fan. It is true that these connections are the most vulnerable to dirt and corrosion. If your headlamps suddenly quit (high and low beam are fuse separately), just wiggling the fuse can often bring them to life, but this is a sign that you need to clean all the fuses and the holders. Sometimes it is necessary to remove the box (one screw further down the side of the wing at the front of the box) and to clean the bullet connectors. I have never had any problems in this regard, but it has been reported often enough to

note.

Previous Page

Contents





FUEL SYSTEM

This part of Jagcare will deal with the fuel system, assuming that the vehicle is a S3 car, equipped with the original engine, and in regular use with no symptoms of illness. I am not considering cars that need to be resuscitated, or cars that have been "lumped"; those are another kettle of fish.



Canadian Spec, V12 fuel cap with French label

Let's start with the basics: fuel. The 4.2 litre XK engine and the V12 are able to run on lead-free 87 RON fuel; the British concern over the removal of lead from fuel has fascinated me. There has not been leaded fuel available in Canada for donkey's years now; and experience has proven that the removal of the lead makes no discernible difference in the performance or the longevity of a car in "normal" service. My empirical evidence for this is my '74 MGB, (owned since new, and in daily use for the last 26 years), which does not have an "unleaded" head. The car operates today as it did in 1974. Case closed as far as I am concerned. There is even less cause for worry with

the Jaguar. All XK engines have aluminum heads and hardened valve seats. They operate perfectly well on unleaded regular grade fuel. The V12 engine is happier on premium unleaded fuel, but my experience is that even this engine runs happily around town on a mid-grade fuel (note: that doesn't mean "mid-quality"). It is my practice to use higher octane fuels for road trips, especially if any high altitude driving is involved (in the V12, at least 92 octane). In any case, it is IMPERATIVE to use a first-quality fuel with proper cleaning additives to keep the injectors clean. My favourite brand is Chevron with Techroline ("Techron" is another brand name for this Chevron additive, and it is available separately), and failing that, Petrocan, which is available throughout Canada; it too contains a powerful additive; typically the amount of additive increases with the octane level. Both these brands have up to 94 octane where I live, but just south of us in the US, Chevron markets only up to a 92 octane. There are certain fuel brands I avoid because my experience with them has been poor. I certainly would not use a "discount" brand in anything other than an emergency situation. If you have not been using a high quality and high detergency fuel available in your area, then adding a bottle of Techron (or other system cleaner if this is not available to you) periodically is a better-than-good idea.



1982 unleaded fuel cap and escutcheon

If your car is rarely used, then the fuel sits longer than it is designed to; the octane rating of the fuel diminishes over time, and the fuel can form a varnish-like substance which can cause sticking of the changeover and return valves. The Techron can help to clear this up, but the best thing is to keep the fuel supply fresh; the best way of doing this is to use your Jaguar as it was designed to be used: on the road. (I scold myself as I say this because my cars are generally not used in wet weather and thus spend long periods of our rainy winter tucked safely in the garage, but I do try to get them out for a good run at least once a week or so).

Another important thing, especially for Jaguars used in cold-weather conditions: keep the fuel tanks FULL. Otherwise condensation forms in the tanks; condensation is H20; H20 promotes rusting of the tanks. For cars used in these conditions an additive to permit the "burning" of the water in the fuel is a great idea. Most fuels are formulated in winter to allow this anyway.



<u>Contents</u>





Tanks: most S3 Jaguars have a "Whoooosh" on opening the fuel cap. The more empty the tank, the greater the sound, and the sound is simply symptomatic of pressurization. When you hear that sound, the sides of your fuel tanks are flexing, and, if the tank is near empty, you can even hear them "pop". Metal has a fatigue factor; seams can stand only so many cycles of flexing before something "gives". My '82 XJ6 has never had this symptom, but my '84 Sovereign once had it, and cleaning the valves at the fuel cannister in the front right wing alleviated the problem, but not entirely. Disconnecting the valve (that is, simply disconnecting the hose from the valve to the cannister) immediately relieves the symptom. But this means that fuel vapour is entering the atmosphere. Environmental responsibility requires another solution. Jaguar used a variety of configurations for the cannisters and valves, and my '82 and '84 were different, and the V12 cars are different again. If you have this symptom, try in the first place to keep your tanks as full as possible to limit the flexing. Second: clean the valve.

The fuel pump on the S3 (XK and V12 engines) is a single, rotary pump which has proved to be extremely reliable, unlike the previously used SU pumps. The S1 and 2 cars used either in-tank pumps, or 2 separate pumps, one for each tank, mounted in the boot. The pump of the S3 is rubber-mounted, in the floor of the boot, and all the fuel lines from the pump are isolated by rubber buffers from the body. If you are experiencing any noise or vibration, check that the buffers are in place and that the lines are not contacting the side of the boot well. The fuel pump relay (mounted on the firewall) has likewise proved to be generally reliable. There is no servicing required for either of these components other than to make sure the electrical contacts are clean and secure. The same can be said for the changeover valve, located near the fuel pump, and the return valves, located in the rear wheel wells. The electrical contacts for the return valves are located behind a round plate at the rear of the wheel well. A very light buffing with 2000 grade paper will make them shiny and effective, and some dielectric grease will ensure that they stay that way.

The fuel filter is a Bosch part and is located at the front of the boot well; it is slated for replacement about every 30,000 miles. Since replacement is infrequent, it makes sense not to buy an inferior brand. The most crucial part of the fuel system for the owner is the high-pressure fuel hoses: these MUST be checked regularly. If you have not had these hoses (from the injector to the fuel rail, and there are other sections as well, especially a short one at the front of the XK engine) changed during your ownership, or do not have proof that it has been changed, it would be advisable to have it done, ensuring that the replacement is high-quality "fuel injection" not ordinary fuel hose.

A regular "sniff" test should be made on a cold engine. Look closely at the engine: open the bonnet; smell for raw fuel and look closely at the EFI side of the engine: look for wet spots. It is difficult to see the fuel spraying as it is almost vapourised, but you can see where it lands. The hoses from the rail to the injectors, and from the metal delivery tube (coming from the fuel pump) to the rail must be verified for security at the clamps. Do not forget that short section of hose at the front of the head of the XK engine. IMPORTANT: if you can smell raw fuel when the engine is hot, you MUST investigate. A hot engine and raw fuel spell trouble. This is particularly important on the V12. The fuel hoses on the V12 are located atop the engine; the ones nearest the distributor wires are vulnerable to ozone damage and are the first to deteriorate.

I always carry a screwdriver on road trips, and have been seen on the concours field tightening a fuel hose clamp!

Previous
Page





The 4.2 engine fuel hose is easily replaced by the owner, once the system has been depressurised (disconnect the fuel pump relay on the firewall, and run the starter motor); there are different diameters of hose and the information necessary is in the archives. Don't forget the hose in the boot area. And use proper fuel hose clamps, not the kind that can cut into the rubber. Alternatively, have a Jaguar-experienced mechanic do it for you. This is perhaps most important with the V12 engine, although a competent owner (not me) can do it.

Previous Page

<u>Contents</u>

MISCELLANEOUS ITEMS

The starter relay: this is the oblong silver relay with multiple connections towards the centre top of the firewall. If you hear a "click" but the starter fails to turn over, it may be a poor battery connection, or it may be this relay. A sharp tap with a screwdriver handle will set the relay (temporarily) right if it is the culprit. (Now this IS a technique every SU fuel pump owner has learned. My MG is now fitted with a failure-proof Australian electronic pump!) The Jaguar starter relay can be taken apart and the contacts cleaned.

Let me repeat here that it is VERY good practice to disconnect the battery before doing any electrical work. When you have done that, take the opportunity to clean and tighten the main connections at the bulkhead/firewall as noted earlier. There is one at either side (one beside the battery, and one on the opposite side). Clean and tighten the ground connection at the top/bulkhead end of the coolant rail on the XK fuel-injected engine. Get under the car, having made the car secure on proper jackstands mounted at the jacking pins, and having chocked the wheels, AND using an additional hydraulic jack under the front subframe. Remove and clean the ground strap connecting the body and the transmission (right side of the car). The transmission connection is by a bolt through the casing. Let me emphasize again that you MUST NOT get under the car unless you have made absolutely sure that it will not shift.

Occasionally you will come across an electrical failure not explained by switch, fuse, relay, or connector failure. In this case, suspect the ground connection. One example: on my '84 Sovereign the electric seat was inoperable when I bought the car. As the seat was locked in the highest (that is with the seat tilted forward) position, this may well have been (to my great benefit) a contributing "frustration factor" for the previous owner. I was befuddled until I suspected the ground; the electric seat ground is at the transmission quadrant mount. I have no explanation for the ground failure, but by making a temporary ground to the front door switch, I proved that the motor and switch functioned perfectly. All I had to do was to make a new ground connection, which I did at another point on the transmission tunnel.

Often new S3 owners complain that the door lights do not work. (Owners of S3 Sovereign and VDP cars note: the driver's door light functions only when that door is opened. This is correct.) As we have noted, in almost all cases, some liberal use of WD40 (or similar) in the switch and manual working of the switch will provide a further 10 years of life. There is no magic in maintaining a S3 Jaguar in perfect operating condition: just common sense, lots of lubrication, and general servicing. After all, in the year AD 2002 the oldest XJ on the list is 33 years old, and the newest is 10 years old. Surely these beautiful machines deserve some tender and loving care, especially if they have been through the hands of more than one owner?

More specific repairs to electrical components such as the wiper parking and cruise control are to be found in the Frequently Asked Questions on the Jag-lovers list: but to summarize the cruise control protocol: seal the bellows, check the cut-off switch at the brake pedal, check the ground at the "set" stalk, check the main switch, check the computer, in that order. By far the most common failure point of the cruise control is lack of vacuum at the bellows. Again this is common sense. The heat of the engine over time dries the rubber, making it less pliant and thus breaking the vacuum seal. On the V12 engine, the bellows is set directly in the V. To make matters worse, you can often note that these V12 engines have been tended by mechanics who don't have common sense. There is a heat shield for the bellows which is supposed to fit UNDER the bellows.

Previous Page

Contents
You often will find it COVERING the bellows, allowing the rubber to bake in its own oven! If your cruise control does not work, all you have to do is to carefully reseal with a bead of silicone, having removed the two end plates and the interior spring. (Be careful not to lose the end for the securing screw on the cable!). If the control still does not work you can check if the problem is at the brake pedal; the switch there is served by two yellow/white tracer wires; simply remove them and bridge them temporarily with a short length of wire. CAUTION: if your cruise control now works, be aware that depressing the brake pedal may NOT cancel the control. The brake light switch is supposed to cancel the cruise control function, with the additional switch as a fail-safe mechanism. But if your brake light switch is not functioning properly....Be prepared to shut off the main switch at the transmission quadrant. Do NOT leave these wires bridged after your test. If this switch is faulty, you can fit a generic "momentary" switch in its place but be sure that the depressed position of the plunger is the one that allows the current to flow.

I can count on the fingers of one hand the number of electrical failures I have had in six XJ cars over a 10 year period. In these cases two were attributable to simple fuse failure (headlamp and a seemingly catastrophic climate control failure), and at least two were non-problems attributable solely to my own stupidity: a window/sunroof failure because I had flipped the master switch (!) and a window failure because I had incorrectly fitted the connector. I admit to a one-time mysterious antenna failure; but it occurred immediately after I was playing in the area of the antenna motor, and it has never recurred. I believe I disturbed the relay, and my cat was simply expressing her disapproval. It is "a true saying, and worthy of all to be believed", that a good many "Jaguar" electrical failures are due to the ham-fistedness of the dreaded Previous Owner(s) and/or their incompetent mechanics (and there are some) who have sought to "improve" the car. We should all try not to become those "Previous Owners" ourselves.

Replacement of the heater valve located at the centre of the firewall on both the 6 and 12 cylinder cars: Shortly after having my hoses and coolant changed I noted some dripping of green liquid under the transmission of my Sovereign. Odd. But I also noted that it appeared only when the engine was first started; leaving the car idle would produce no sign of leakage. I finally took my own advice and started the cold engine, opened the bonnet and looked: there it was, coolant dripping from the heater valve. I tried tightening the clamps, to no avail. A quick decision was made to buy and install a heater valve. There are GM plastic replacements that will do, but I opted for the fantastically expensive, but very beautiful Jaguar original. (Listen, at \$175 Canadian I HAVE to think it is beautiful). The advantage of an OEM product is that it fits, and it works. A malfunctioning heater valve (one that will not close) can detrimentally affect the climate control. If your car is not cooling properly, this is one thing to check. A closed valve has the lever pushed UP.

Now: the valve is held to its bracket by two screws, not immediately apparent. First carefully remove the vacuum hose from the top. It is best the remove the screws (being careful not to drop them under the car), and displace the valve to allow easier removal of the hose clamps. On the V12 car this procedure is somewhat more difficult because there is less room to work. The manual says to drain the coolant but this is not necessary; a pan under the rear of the engine will catch the small amount that will escape; I used a wine bottle stopper to plug the hose, and I removed only one at a time, fitting the new valve to each in turn. Simple. Once the hoses are fitted to the new valve, you can take your time tightening the clamps and refitting the valve to its bracket, and fitting the screws. This is probably a 20 minute job at most, but I wasted some time removing the bolt that hold the bracket to the firewall. Totally unnecessary. If you keep your XJ long enough, you will do this easy job. I suspect that many will opt for the cheaper plastic replacement which may not last the 161,000 kilometers that my original did. I do not know how such a valve is fitted to the bracket, or even if it can be, but it is light enough to simply be supported by the heater hoses.

Previous Page

<u>Contents</u>

Examination of my old valve revealed no obvious cause of leakage other than some deposits and corrosion on the pipes themselves. Since this dripping occurred after a change of heater hoses, I believe the valve is not faulty. The problem was that the new hose was not sealing around the deposits, and in addition, the mechanic who cut the old hose off (not me) put a nick in the pipe. Enough to leak when cold, but when the rubber swelled with heat, the leak was sealed off. This valve has now been cleaned up and sits on my shelf as a spare.



6 Cylinder Engine - Note white cooling fan.

Engine fan: both the S3 XJ6 and the S3 V12 cars (after '81) left the factory with white (yes, white, not yellow) plastic fans. If you have not done so, you need to examine your fan closely. Almost certainly you will find that it has cracks across the hub area, and possibly cracks at the base of the blades. Now if by chance your car were to develop failure of the Torquetrol unit, that is the fan "clutch" unit, the cracked fan would begin to spin at the speed of the engine, and at highway speeds this can be sufficient to send a blade or two around the engine compartment, into the radiator, up into the bonnet... It is the combination of the two factors that is fatal. Since you will not be warned of a Torquatrol failure (no more common on the

Jaguar than on any other car), you should pay attention to those fan cracks. There are three options: you can replace with an upgraded (but expensive) Jaguar fan, still plastic, but of an apparently softer plastic, more securely fastened. The OEM XJ6 (EAC 3266) fan is still white, but the V12 fan (EBC 4553) is now black, of the same overall diameter, but with a smaller hub and therefore longer blades. Presumably this will pull more air through the radiator. And that means improved cooling.

I have done this replacement on two of the six cylinder cars and three V12s, and it is certainly within the capabilities of any owner. The second option, less expensive but not original, is to replace with an aftermarket fan. There is an Imperial brand metal fan (#220618) which apparently fits the Jaguar hub for the six cylinder XK engine. The third option is yet another step away from originality: replacing the belt driven fan with an electric one, but this can bring further complications.

It should be emphasised that the S3 Jaguar, whether 6 or 12 cylinder, has a perfectly good cooling system, more than adequate for the car providing the system is properly maintained. If your car is overheating, fitting an electric fan is not the answer because you are treating the symptom, not the disease. You may need to have your radiator removed and "rodded" to clear out deposits which are plugging the passages, and/or you may need to have the thermostat (2 in the case of the V12) replaced. The S3 engines, both of them, should run at 88 to 90 degrees C with an 88 degree thermostat. Even in exceptionally hot conditions, the temperature should not rise above 95. If it does, the system needs attention. This is particularly important for the V12 engine in which overheating can be a very expensive experiment. And a further note: it is good practice to make sure your rad hoses are in proper condition. If they are hard to the touch, have them replaced. Do not forget the small ones (on the XK engine, the one behind the distributor is the one which will blow when least desired). And NEVER add the Barr's Leaks that Jaguar recommended at each coolant change. Even the Jaguar dealers stopped paying attention to that rubric when they found that the result was clogged rad and heater core passages.

In any case, the replacement of the fan on both the XJ6 and the V12 involves loosening the fan shroud (bolts above and below), and temporarily moving a minor coolant hose (there will be a small amount of coolant loss, but you can plug the ends). Your goal is to allow sufficient movement of the shroud to allow manoeuvering the fan out. The plastic fans and Torquatrol units are held to the water pump plate bolts by 4 nuts. You simply have to remove the 4 nuts and tap the unit off, and then work it out around the shroud. If you have lilliputian fingers, the job will be easy. Normal males have larger than necessary hands for this job, and it is likely that you will drop one or more nuts to the floor, so have a pan ready.

<u>Previous</u> <u>Page</u>

<u>Contents</u>



You will need to pull on the belt to allow the water pump to rotate for access to the 4 nuts, as one will always be out of reach. You remove the fan and Torquatrol unit as one piece, and separate them on your worktable (again, 4 nuts). Fitting is a reversal of this procedure, but a bit more frustrating. Just make sure that the nuts are fully tightened and the use of nylock nuts is a good idea. I was not able to use them on my V12 because they were just sufficiently deeper than the normal nut that I did not have enough clearance. In all, the job will take less than an hour, but you will have complete peace of mind. One further note here: it is good practice to always check the Torquatrol unit when you have the bonnet open, and certainly before a highway run. It should move with some resistance, spinning not more than half a turn.

Coolant: the antifreeze should be changed every two years or so. Note that Jaguar specifies coolants that are *free of phosphates*. There are now superior coolants designed to last 5 years, which are free of silicates and phosphates. It is claimed that the removal of the silicates will greatly improve the life of the water pump seals, so this is well worth the extra cost. Leaving the coolant in for 5 years may be a bit of a stretch, in any case. If you have a V12 engine, it is good practice to raise the front of the car slightly to allow any trapped air bubbles to escape more easily, thus preventing damaging "hot spots" within the engine, and allowing the full amount of coolant to be installed. The 4.2 litre engine is best drained by removing the end of the lower rad hose, unless you have an '82 or earlier car in which case there is a drain bolt on the transmission cooler pipe below the radiator (much easier; why did they eliminate it?). On the XK engine there is also a drain plug on the block just forward of the transmission dipstick tube. Please remember to dispose of the coolant responsibly. Fish do not like the taste of antifreeze.

Previous Page

<u>Contents</u>

LUBRICATION.

If there is one thing that a Jaguar owner can do to ensure longevity for his car, it is regular lubrication. The XJ saloon can have up to 17 grease points on the suspension components. Some of these were eliminated as the models moved through production: in the mid-Series 3 cars the grease point on the steering rack was eliminated, then the points on the lower ball joints, and so on. But the rear suspension continued with 10, yes 10 grease points.

"Technicians" (grease monkeys) at the quick-lube places have never even heard of rear suspension grease points. Make this resolve: never, never take your Jaguar to a quick-lube shop. The number of cars that leave those shops with stripped drain plugs is beyond belief. To prove that they have stripped the plug and that it is now leaking, it is their custom to spray-paint the sump around the plug. This has two additional purposes: first, the bright yellow (occasionally fluorescent red) paint serves to disfigure the underside of your car; second, it helps the next "technician" to know which nut is already stripped. He needs to know that this is the oil sump and that he need not bother trying to look for a strippable plug on the transmission pan. This is a time saving measure for them: so many sumps, so little time to strip the plugs.

Grease: the front greasing is a doddle, as they say. You MUST lift the car up to do this. You cannot inject the grease properly if the car is resting on its wheels. Remove the wheel, clean the nipple ("zerk") and inject a couple of strokes-worth of grease (watch for the plastic cap surrounding the nipple to rise; when it does, you have greased enough. When you grease too much, it starts to squeeze out the edges of the plastic). Don't forget the nipple on the hub, which is well-nigh inaccessible with the wheel on, anyway. Your car may or may not have lower ball-joint grease points. My '82 does, my later cars do not. The rear grease points are not so easily accessed, and the ones on the inner U-joints require access from under the car. You may not feel comfortable about getting under a 4500 pound car.

The steering rack nipple was eliminated I think for the '84 model year. Grease VERY sparingly if you still have a nipple fitted at the pinion area. The rear end of the car is a bit more problematic. Again, remove the wheel, having lifted the car: now, here is the problem: to properly grease the rear, you have to get right under the differential area, and this MUST NOT be done unless the car is securely supported. I personally leave this until my car is on a mechanic's hoist. The greasing should be done once a year at least, or every 5-7000 km. The schedule in the manual allows for longer periods, but I prefer more frequent attention.

To repeat what was said in the section on wheels, it is good practice to remove the wheels a couple of times a year anyway, ESPECIALLY if you live in an area where road salt is used. The alloy wheels tend to form a lasting relationship with the steel hub plates unless coated with copper grease. If you remove the wheels during regular servicing, this should not present a problem. I have never experienced this phenomenon, but we have had complaints from new owners; obviously the PO's were not having the cars properly serviced.



V12 Engine, Canadian Specification

Brake fluid: unless you have had your brake system rebuilt and have new seals, it is probably best to stick to regular DOT 3 or even better, DOT 4 fluid which has a higher boiling point. Castrol GT-LMA fluid is reputed to be about the best (dry boiling point 446 degrees F), and this is what I use. The Jaguar Super DOT 4 brake fluid (green tin, from your Jaguar dealer) is even better: its boiling point is 500 degrees F. When your S3 car was new it had a circular foam ring around the brake reservoir cap to prevent fluid leaking onto the inner wing and ruining the paint (see the V12 engine photo). It should not be hard to make a new one.

Previous Page

<u>Contents</u>

Oil: The 4.2 XK and the 5.3 V12 engines both call for 20W50 oil under most conditions. I won't get into the benefits and possible disadvantages of synthetic oils here as this topic has been discussed on the list at length; but if you change your oil frequently there is little benefit in switching from conventional oil, and in a high mileage engine there may be some detriment (leaking seals with some brands). But not all XK engines leak oil I have one (my '82) that has never deposited a drop on the garage floor. On the other hand, one of my V12s was not at all garage-trained when I got it. After spending a good deal on fitting the upgraded Jaguar seals and fasteners, it is now bone dry. But if you do have engine leaks, you might investigate Valvoline Max-Life Oil. It is formulated with a seal softener especially for high mileage engines, and it is available in 20W50 grade, as well as lighter weights. There are advantages, though, to the "new" synthetic oils and "semi-synthetic" (blended) oils, particularly in protection at start-up. My own choice is to use conventional oil and to change it every 3000 km. I change the filter at every second oil change, and I use either Bosch filters (not original, I know) or the original Jaguar filters.

Changing the oil on the 4.2 is strictly a "DIY" thing. Easy. You don't need to raise the car. Get a longhandled spanner (wrench) of appropriate size (21 mm?); slide under the right side of the car, having prepared a large, flat oil container (holding at least 10 litres). Loosen the plug, position the container, and then removed the plug by hand. Gloves may be used here since used oil is reputed to be carcinogenic, though I do not know of any mechanics with cancerous lesions on their hands. The oil flows more freely when the engine is warm (not HOT), but even cold, there is no problem. You just have to wait longer for the oil to drain. I let it drain for an hour or so while I do something else. It helps, for us obsessive types, to raise the LH side of the car to "encourage" all the oil out of the sump. To this point, the procedure is exactly the same for the V12 cars.

The filter is fairly easily reached, but it sits on the 4.2 engine at a right angle to the block. This means that when you remove it, oil gushes down over the steering rack gaiter. This is made of an oil resistant "rubber" but still..... I prefer to cover the gaiter with plastic. Let the filter fall into the pan to drain. Use a cloth to clean the engine area around the oil filter. What if you had an accident and your oil filter area was dirty? What would they say? Remember what your mother said about underwear? Replacing the filter is child's play unless you do what I do. I dislike "dry" starts, and if the filter is empty, it takes that much longer for lubrication to get to the top of the engine. I "pre-fill" the filter. I slosh clean oil in it and fill it about half full. I smear some clean oil on the rubber seal, and refit, just HAND TIGHT and then a quarter turn. You do not want the filter too tight or it will be hard to remove.

On the V12 car the filter is located on the left-hand side of the engine in a vertical position, so it is easier to use this "pre-filling" technique. You will probably have to raise the car for access. Make sure the car is secure before you slide underneath. There may be some prestige in being crushed to death by a V12 Jaguar, but the result is permanent. Once the filter is installed, you can refit the drain plug, having cleaned it. The copper washer can be used many times, but if it starts to seep oil, it can be "annealed" again by heating and flattening; or you can buy a new one; they are cheap. Do NOT over tighten the plug; that is a job for the quick-lube boys.

Fill the engine with 6 -7 litres of oil for the XK engine, 10 litres for the V12. Do not overfill. You can always add more oil tomorrow, and remember that an overnight rest period is the only way to get a true level indication on the 4.2. It is sufficient to have the level at 3/4 up the cross-hatch on the dipstick. I have found that oil above this mark seems to disappear quickly anyway, whereas at this level, it never seems to change. The V12 engines do not seem to consume any significant amount of oil.

Previous
Page



<u>Next Page</u>

Transmission: The Borg Warner 66 transmission can be a trusty unit despite its bad press in North America (actually it has had rather good press in Europe: from the February 2002 number of Classic Jaguar World magazine: "The automatic gearbox (of the S3) is known to be long-lasting and relatively smooth even by today's standards"). But it needs to have fresh fluid on a regular basis. The BWs that fail at an early age are those that have not been attended to with regular 25-30,000 mile fluid changes. If they receive this attention they are good for at least 100,000 miles, and likely much more. The filters can be cleaned; I have not serviced the transmission myself, although I know that others have. I entrust this to a transmission specialist. It is a good idea to have all the old fluid flushed at least once; refilled with Dexron III or Type F (neither is the original specification, which is Type G, no longer available). Dexron III gives a slightly softer shift, which suggests slightly more wear of the friction surfaces, but I have used it for some time with no problems at all. Type F gives a slightly "crisper" shift, which some prefer. The crucial thing is that it be fresh, and pink. If your fluid is brownish, it needs changing NOW. The GM 400 fitted to the Series III V12 is a smooth and reliable unit, and takes Dexron III fluid. Earlier V12 cars used Borg Warner transmissions, which, I believe, will take the Type F fluid now. If you have the GM 400 serviced, it is a good idea to replace the plastic accumulator valve with a metal one as used in most GM cars.

The rest of the Jaguar is lubricated like any other: the door hinges occasionally benefit from light oil. Anything that squeaks should be attended to. Keep it out of the sun unless it is in use. That is it really. That is how to make your XJ easily last 200,000 miles and more.



1987 V12 Vanden Plas

Previous Page

<u>Contents</u>

